



MIAMI-DADE COUNTY
BUILDING CODE COMPLIANCE OFFICE (BCCO)
PRODUCT CONTROL DIVISION

MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING

140 WEST FLAGLER STREET, SUITE 1603
MIAMI, FLORIDA 33130-1563
(305) 375-2901 FAX (305) 375-2908

www.miamidade.gov

NOTICE OF ACCEPTANCE (NOA)

Metcoe Skylight Specialty Co., Inc.
3400 S.W. 26th Terrace, Suite 46
Ft. Lauderdale, Florida 33312

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed by Miami-Dade County Product Control Division and accepted by the Board of Rules and Appeals (BORA) to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Division (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. BORA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Division that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: 9/16" Laminated Glass and Aluminum Extrusions Skylight System

APPROVAL DOCUMENT: Drawing No. 301-TEST, titled " Test Unit " sheets 1 through 7 of 7, dated April 25, 2006, last revision dated March 25, 2010, prepared by Sentech Consultants, LLC, signed and sealed by Alfonso Lopez, P.E., on March 26, 2010, bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and the expiration date by the Miami-Dade County Product Control Division.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, Gardena, CA, and the following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA 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 NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA **revises & renews** NOA # **07-0511.07** and consists of this page 1, evidence submitted pages E-1 & E-2 as well as approval document mentioned above.

The submitted documentation was reviewed by **Helmy A. Makar, P.E., M.S.**



Helmy A. Makar
 05/19/2010

NOA No. 10-0420.05
Expiration Date: 05/19/2015
Approval Date: 05/19/2010

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 05-0104.01

A. DRAWINGS

1. *Drawing No. 04-138, titled "16'-0" Max. Wide Impact Resistant Gabled Skylight " sheets 1 through 7 of 7, dated 10/15/04, last revision #1 dated 04/22/05, prepared, signed and sealed by Walter A. Tillit Jr., P.E.,*

B. TESTS

1. *Test report on Large Missile Impact Test, Cyclic Load Test, and Uniform Static air Pressure Test on Metcoe Skylight Specialty Systems, prepared by American Test Lab of South Florida, Report No. 0204.01-04, dated 08/18/04, signed and sealed by William R. Mehner, P.E.*

C. CALCULATIONS

1. *Calculation titled " 16'-0" Max. Wide Impact Resistant Gabled Skylight ", 21 pages, dated 11/08/04, signed and sealed by Walter A. Tillit Jr., P.E.*

D. QUALITY ASSURANCE

1. *By Miami-Dade County Building Code Compliance office.*

E. MATERIAL CERTIFICATIONS

1. *Mill Certified Test Report issued by International Extrusion Corporation, dated 08/06/04, for Die #21116 with the Chemical Composition and Alloy Temper.*
2. *Mill Certified Test Report issued by International Extrusion Corporation, dated 11/18/04, for Die #H-13273 with the Chemical Composition and Alloy Temper.*

2. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #05-0929.07

A. DRAWINGS

1. *Drawing No. 05-303, titled "16'-0" Max. Wide Impact Resistant Gabled Skylight " sheets 1 through 7 of 7, dated September 23, 2005, last revision #1 dated 09/23, 2005, prepared by Tilteco, Inc., signed and sealed by Walter A. Tillit Jr., P.E.*

B. TESTS

1. *None.*

C. CALCULATIONS

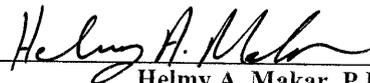
1. *None.*

D. QUALITY ASSURANCE

1. *By Miami-Dade County Building Code Compliance office.*

E. MATERIAL CERTIFICATIONS

1. *None.*



Helmy A. Makar, P.E., M.S.
Senior Product Control Examiner
NOA No. 10-0420.05
Expiration Date: 05/19/2015
Approval Date: 05/19/2010

Metcoe Skylight Specialty Co., Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

3. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #07-0511.07

A. DRAWINGS

1. *Drawing No. 301-test, titled " Pyramid Unit Plan " sheets 1 through 7 of 7, dated April 25, 2006, last revision dated August 30, 2007, prepared by Sentech Consultants, LLC, signed and sealed by Alfonso E. Lopez, P.E.*

B. TESTS

1. *Test report on Large Missile Impact Test, Cyclic Load Test, and Uniform Static air Pressure Test on Metcoe Skylight Specialty Systems, prepared by American Test Lab of South Florida, Report No. 1208.01-06, dated 01/12/2007, signed and sealed by Henry Hattem, P.E.*
2. *Addendum to test report #1208.01-06, prepared by American Test Lab of South Florida, dated 09/05/2007, signed and sealed by Henry Hattem, P.E.*

C. CALCULATIONS

1. *Calculation titled " 16'-6" x 16"-6" Pyramid Test Unit Structural Design Calc., 28 pages, dated 01/21/2007, signed and sealed by Alfonso E. Lopez, P.E.*

D. QUALITY ASSURANCE

1. *By Miami-Dade County Building Code Compliance office.*

E. MATERIAL CERTIFICATIONS

1. *None.*

4. NEW EVIDENCE SUBMITTED

A. DRAWINGS

1. *Drawing No. 301-TEST, titled " Test Unit " sheets 1 through 7 of 7, dated April 25, 2006, last revision dated March 25, 2010, prepared by Sentech Consultants, LLC, signed and sealed by Alfonso Lopez, P.E., on March 26, 2010.*

B. TESTS

1. *None.*

C. CALCULATIONS

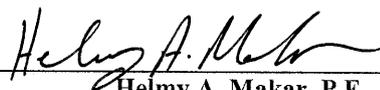
1. *Calculation titled " 16'-6" x 16"-6" Pyramid Test Unit, 31 pages, dated 03/26/2010, signed and sealed by Alfonso E. Lopez, P.E.*

D. QUALITY ASSURANCE

1. *By Miami-Dade County Building Code Compliance office.*

E. MATERIAL CERTIFICATIONS

1. *None.*



Helmy A. Makar, P.E., M.S.
Senior Product Control Examiner
NOA No. 10-0420.05
Expiration Date: 05/19/2015
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GENERAL NOTES

1. Skylight shown on this Product Approval Document (P.A.D.) has been verified for compliance in accordance with the 2007 edition of the Florida Building Code. This skylight may be installed at high velocity hurricane zones provided that the design pressures conform with the pressure rating indicated in note 5. Design live and wind loads shall be determined as per sections 1616 and 1620 of the above-mentioned code.
2. In order to verify that anchors and perimeter connections on this P.A.D are not overstressed under design pressures, for every single application of this skylight system, the perimeter connection bolts and anchors shall be verified.
3. Shop drawings and structural calculations shall be submitted for every permit. Drawings may include larger skylight width, length and rise w/corresponding larger cross section rafters & mullions, but pressure rating and maximum glass panel size shall **NOT** exceed those indicated on this Drawings.
4. This P.A.D covers pyramid shape skylights. Other shapes/configurations w/sloped glass may be accepted provided that the above mentioned conditions are compiled with. The design of larger components for larger skylights or skylights with different shapes shall be performed by a Florida P.E. and reviewed by the structural plans examiner of the corresponding building department on a job specific basis (See note 18). Design pressure distributions shall comply with the code requirements for the skylight shape selected.
5. Design pressure rating at roof is +75.0 psf. Design suction rating at roof -85.0 psf.
6. Structural adequacy of supporting structural members is not part of this P.A.D. Structural design of the skylight support structure shall be performed by the structural engineer of record for the project. Structural design shall include and take into consideration the actual Vx, Vy and Vz loads transferred from this skylight to the support structure. Based on dead, live and wind loads using the load combinations as per sections 2.3 or 2.4 of ASCE 7-05. Adequacy of supporting structural members shall be reviewed by structural plans examiner of the corresponding building department on a job specific basis.
7. All aluminum extrusions shall be aluminum association 6063-T6 alloy and temper.
8. All aluminum sheet shall be aluminum association 5005-H16 alloy and hardness.

9. All screws to be stainless steel AISI series 304 or 316 strain hardened or heat treated with min. tensile load capacity Tu=4275# & min. Ultimate shear load capacity Su=2700# per ASTM B-593 & B-594.
10. All aluminum pop rivets to be 5052 aluminum alloy with aluminum mandrel.
11. Bolts to be stainless AISI series 304 or 316 with 50 ksi (min) yield strength and 90 ksi tensile strength, per ASTM B-593 and B-594.
12. Glazing system shall comprise of the following components:
 - a. All gaskets to be made of extruded silicone, with durometer hardness =55, ultimate tensile =1400 psi min, elongation=334% min.
 - b. All backer rods to be tundra foam polyurethane manufactured by Industrial Thermo Polymers Limited, with the following physical properties:

| | |
|----------------------------------|----------------------|
| Polyurethane quality | ASTM 1564 |
| Non-Compressed density | 2-3 lbs/cu. Ft. |
| Compressed density | 4-6 lbs/cu. Ft. |
| Compression deflection | 1 psi @ 25% |
| Elongation | 130% |
| Tensile Strength | 15 lbs min |
| Temperature range (intermittent) | -70 deg to 450 deg F |
 - c. Structural silicone for glass sealant at rafters to be Dow Corning 995 silicone structural adhesive
 - d. All weather sealant to be Dow Corning 791 silicone.
 - e. All Glazing blocks to be neoprene or rubber material with durometer hardness =90.
13. All flashing to be lapped 3" and set on a bed of silicone sealants.
14. Glass to be Sentry Glass Plus, per Miami -Dade County approved NOA No. 06-1205.10, 9/16" thick impact resistant laminated glass manufactured by Dupont Denemours, Inc. It consist of 1/4" heat strengthened glass + 0.090" Sentry Glass Plus interlayer by Dupont + 1/4" heat strengthened glass. The maximum glass panel size is 24.88 square feet.

Additional details using NOA #05-0929.07 may be incorporated as part of this NOA provided design and wind loads do not exceed pressures indicated on NOA #05-0929.07

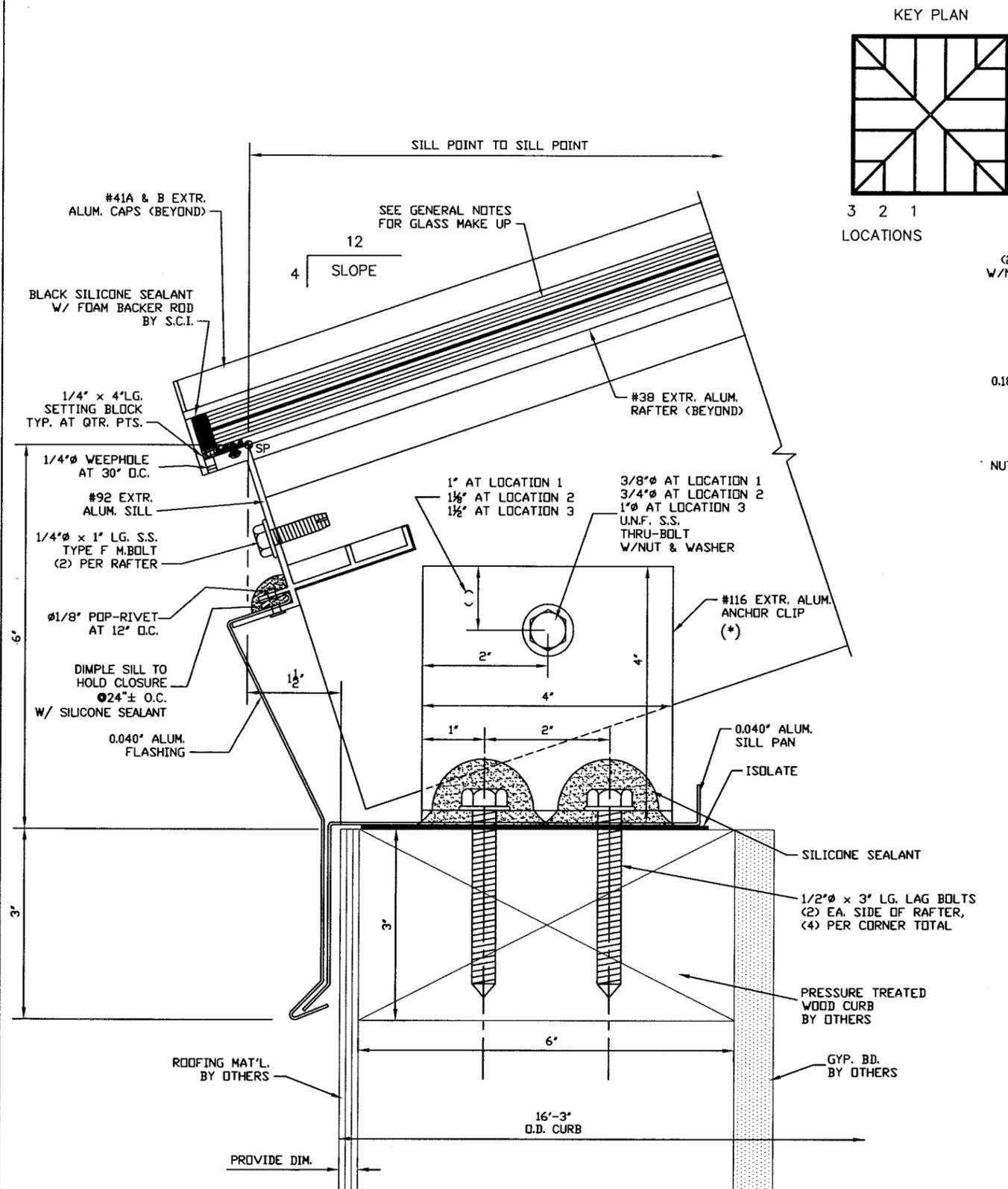
MAR 26 2010



15. All welding to conform to the American Welding Society A.W.S D.1.2. 2004 edition regulations. Use Certified Welders. Use ER-4043 or ER-45356 Electrodes.
16. Aluminum members in contact with concrete shall be protected accordingly with section 2003.8.4.4 of the 2007 edition of the Florida Building Code.
17. Aluminum members in contact with steel shall be protected accordingly with section 2003.8.4.2 of the 2007 edition of the Florida Building Code.
18. Paint, finish and color to be selected by architect of record for the job in coordination w/Metcoe, and shall comply with AAMA 1600 specification, section 3.11.
19. It shall be the responsibility of the contractor to verify the soundness of the structure where the skylight is to be attached to insure proper anchorage. See note 3 above. Contractor is to seal/caulk all skylight component edges as indicated on this drawing to prevent wind/rain intrusion.
20. Skylight installation shall comply with specs indicated in this drawing plus any building and zoning regulations provided by the jurisdiction where permit is applied to.
21. The product approval document (P.A.D.) prepared by this engineer is generic and does not provide information for a site specific job.
22. Contractor to be responsible for the selection, purchase and installation including life safety of this Product approval provided he/she does not deviate from the conditions detailed on this document. Construction safety at site is contractor's responsibility.
23. This product approval document will be considered invalid if modified.
24. Site specific projects shall be prepared by a Florida registered engineer or architect which will become the professional of record (P.O.R.) for the project and who will be responsible for the proper use of the P.A.D. Professional of Record, acting as delegated engineer to the P.A.D engineer, shall submit to this latter the site specific drawings for review.
25. This P.A.D shall bear the date and original seal and signature of the professional engineer that prepared it.

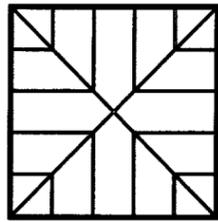
PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 10-0420.05
Expiration Date 05/19/2015
By *Helmut A. Mohr*
Miami Dade Product Control
Division

| | | | |
|--|------------|--|--------------|
| QUALITY CONTROL | | TEST UNIT | |
| JOB NAME | | CONTRACTOR | |
| ADDRESS | | ADDRESS | |
| OPERATIONS | | PRODUCTION | |
| 1715 WEST 135th STREET GARDENA CA 90249 PHONE 310/354-0030 FAX 310/323-5803 WWW.METCOE.COM | | SENTECH CONSULTANTS, LLC 2925 Persimmon Valley Trail Austin, TX 78732 Phone: 512-266-7045 Fax: 512-266-3844 www.sentechas.com | |
| DRAWN BY MARK M. | CHECKED BY | JOB NO. 301-TEST | DETAIL NOTES |
| DATE 04-25-06 | REVISIONS | BY | DATE |
| 7 | 08/30/07 | JA | 03/25/10 |
| 1 | 03/25/10 | MR | |

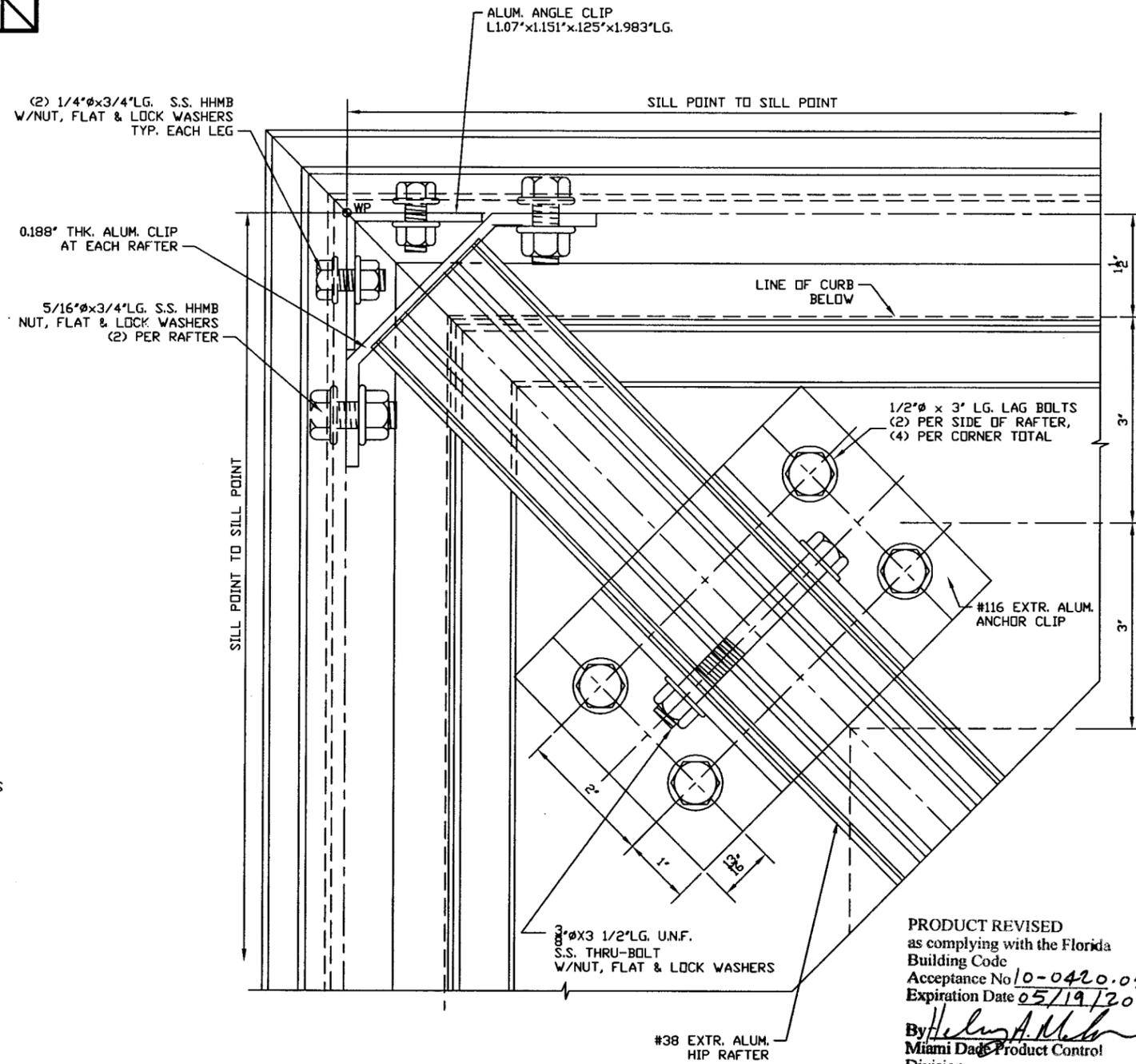


1 SILL DETAIL
3 SCALE: FULL
ARCH. REF.: .

KEY PLAN



3 2 1
LOCATIONS



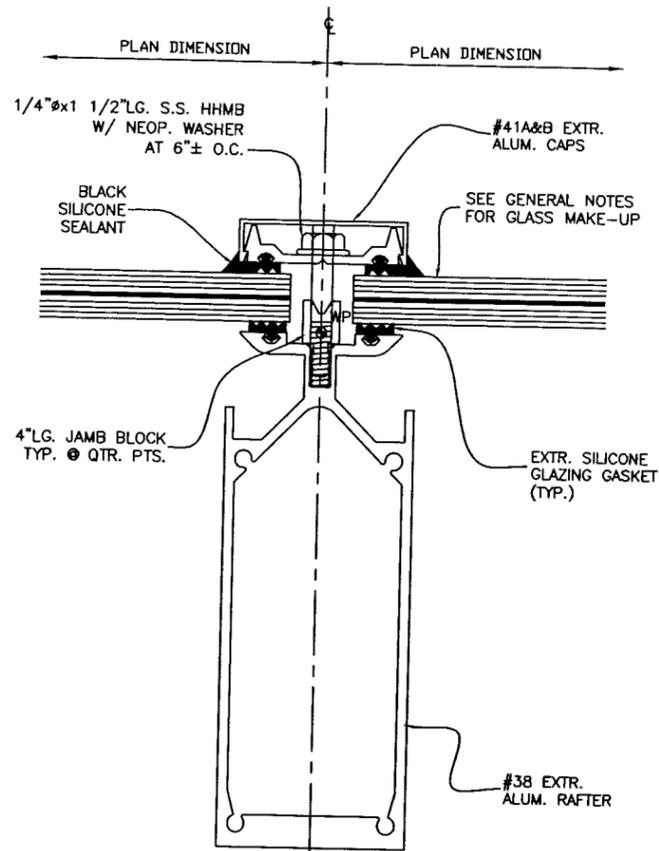
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By *Helmy A. M...*
Miami Dade Product Control
Division

MAR 26 2010

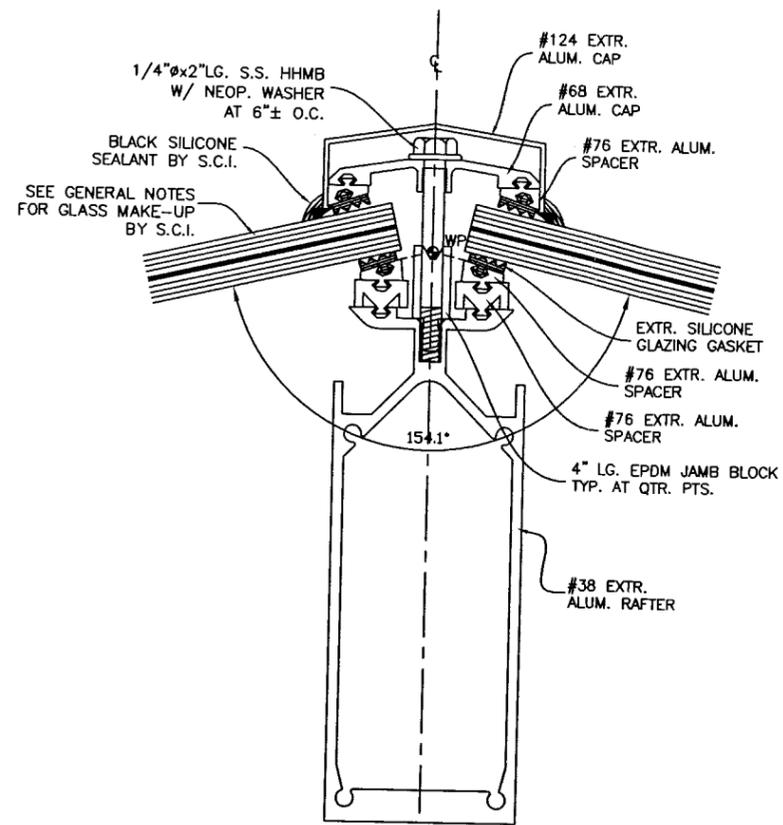
2 CORNER DETAIL
3 SCALE: FULL
ARCH. REF.: .

* The anchor size, perimeter bracket size, and perimeter connection bolt sizes are only required for +75psf and - 85psf design loads. Actual bracket size, connection bolt size, and anchor bolt size will vary with each application.

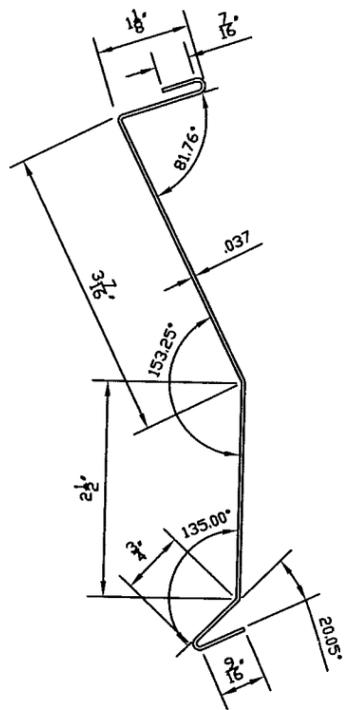
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| DRAWN BY MARK M. | | REVISIONS | | BY | | PRODUCTION | | OPERATIONS | | QUALITY CONTROL | |
| CHECKED BY | | 9/7/06 | | 9/7/06 | | SENTECH CONSULTANTS, LLC | | TEST UNIT | | CONTRACTOR | |
| DATE | | 8/30/07 | | JA | | 1715 WEST 135th STREET GARDENA CA 90249 PHONE 310/354-0030 FAX 310/523-5803 WWW.METCOE.COM | | METCOE SKYLIGHT SPECIALTY CO., INC. | | ADDRESS | |
| 3 OF 7 | | 301-TEST | | DETAIL | | 2925 Perimeter Valley Trail Austin, TX 78732 Phone: 512-266-7045 Fax: 512-266-3844 www.sentechas.com | | DADE COUNTY, FL. | | | |



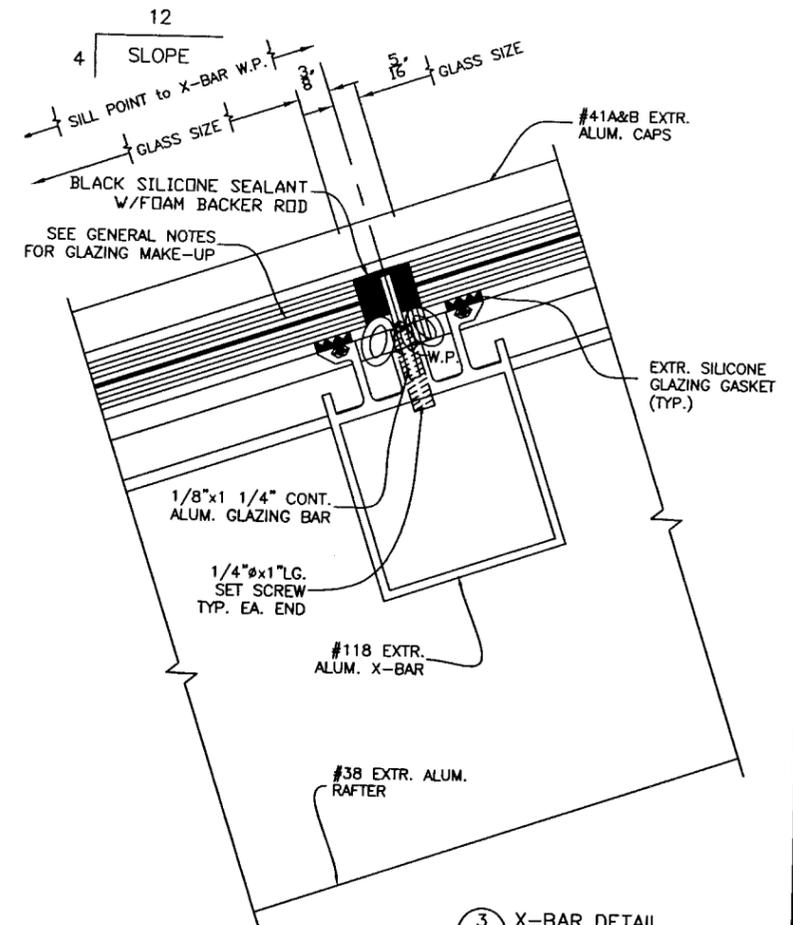
1 RAFTER DETAIL
4 SCALE: FULL



2 HIP RAFTER DETAIL
4 SCALE: FULL



SILL FLASHING
SCALE: FULL



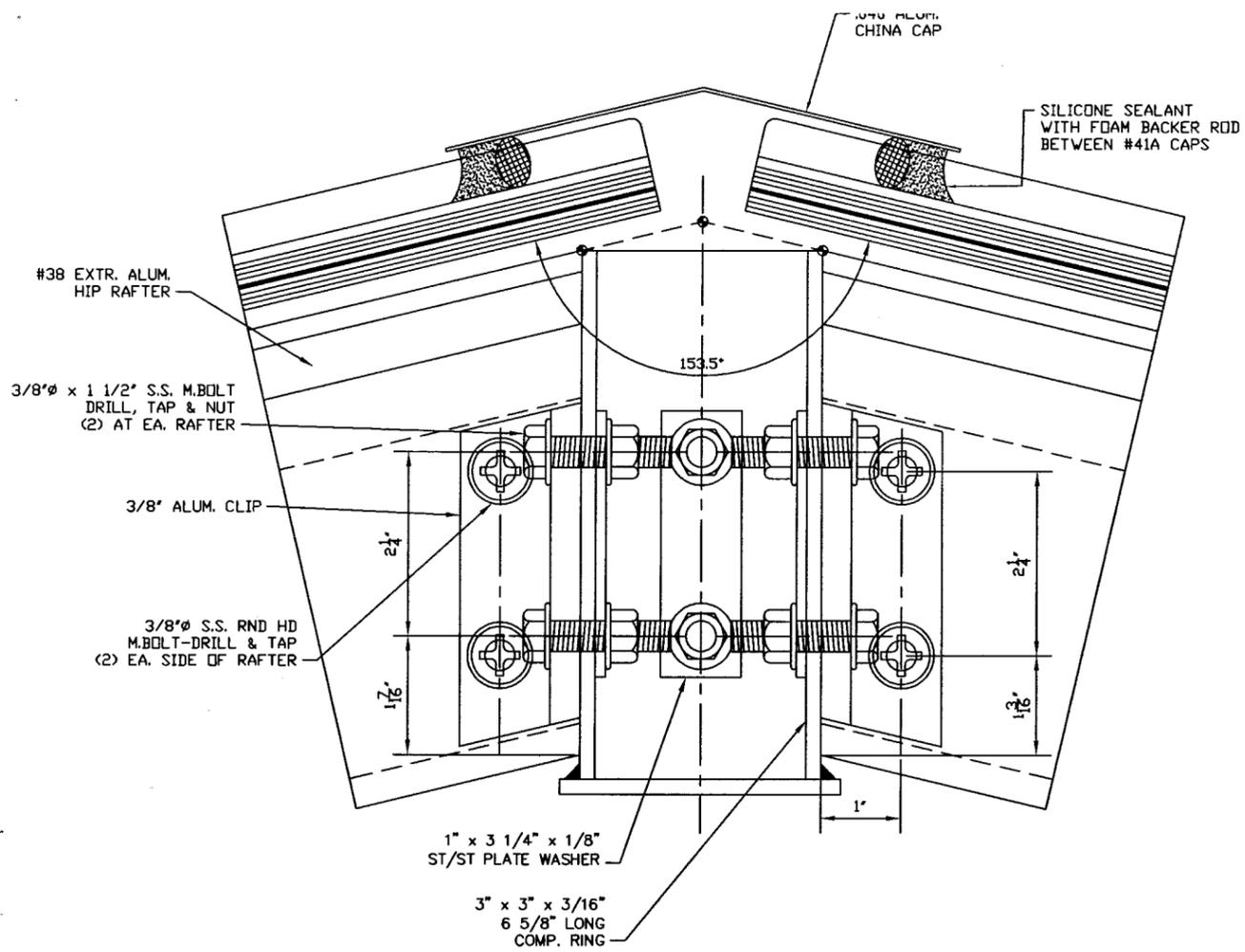
3 X-BAR DETAIL
4 SCALE: FULL

PRODUCT REVISED
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Building Code
Acceptance No 10-0420.05
Expiration Date 05/19/2015
By Helmut Adolph
Miami Dade Product Control
Division

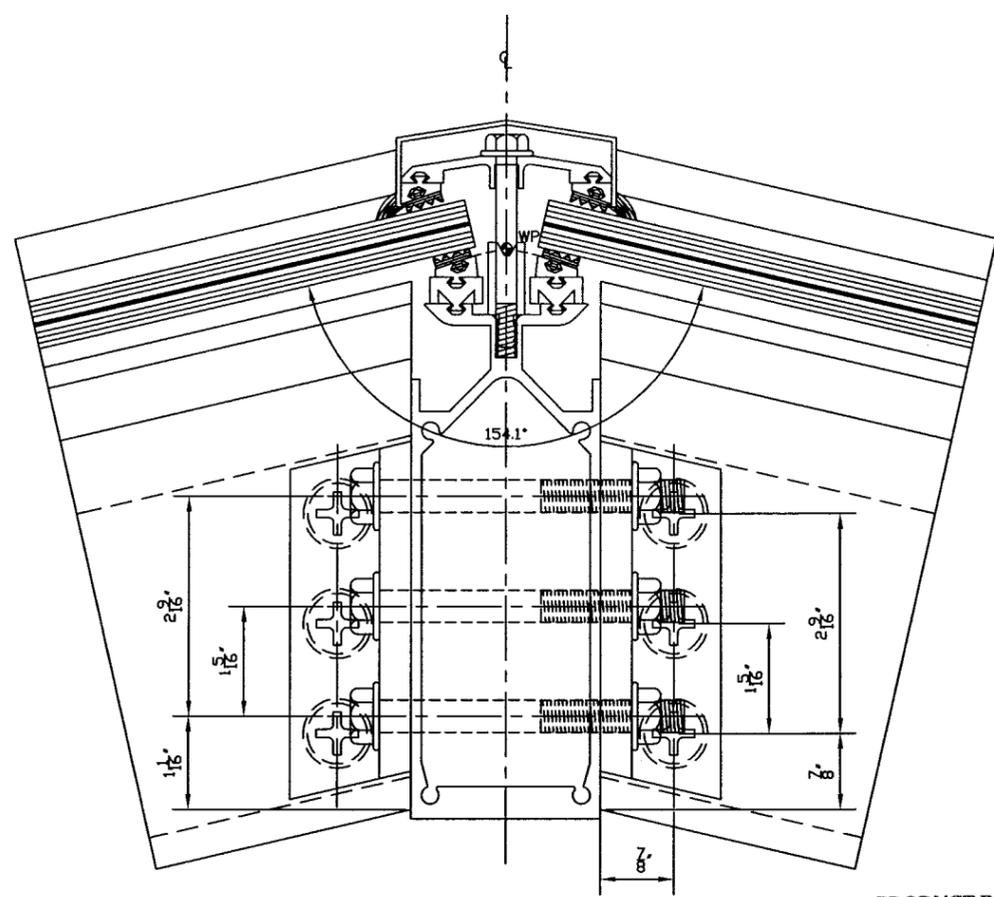
MAR 26 2010

[Signature]

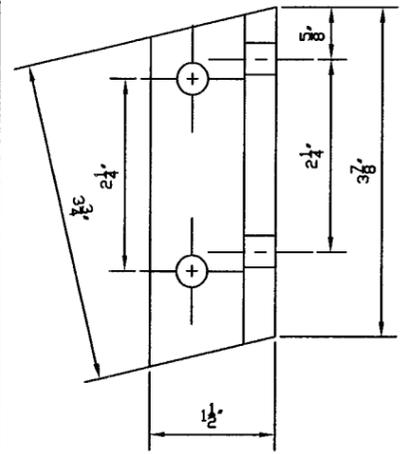
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| DRAWN BY MARK M. | | REVISIONS | | PRODUCTION | | OPERATIONS | | QUALITY CONTROL | |
| CHECKED BY | | 9/7/06 | | BY | | SENTTECH CONSULTANTS, LLC | | JOB NAME | |
| DATE | | 8/30/07 | | 2925 Persimmon Valley Trail Austin, TX 78732 Phone: 512-266-7045 Fax: 512-266-3644 www.senttechs.com | | TEST UNIT | | CONTRACTOR | |
| 04-25-06 | | | | | | 1715 WEST 135th STREET GARDENA CA 90249 PHONE 310/523-0030 METCOE FAX 310/523-5803 WWW.METCOE.COM | | METCOE SKYLIGHT SPECIALTY CO., INC | |
| 301-TEST | | | | | | DETAIL | | ADDRESS | |
| DETAIL | | | | | | DETAILS | | DADE COUNTY, FL | |
| 7 | | | | | | | | | |



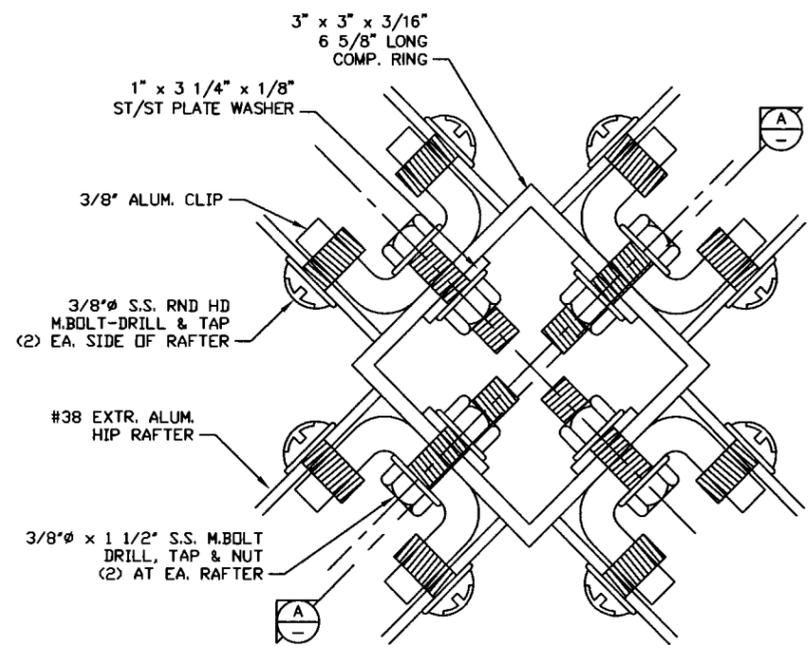
(A) COMP. RING SECTION VIEW
SCALE: FULL



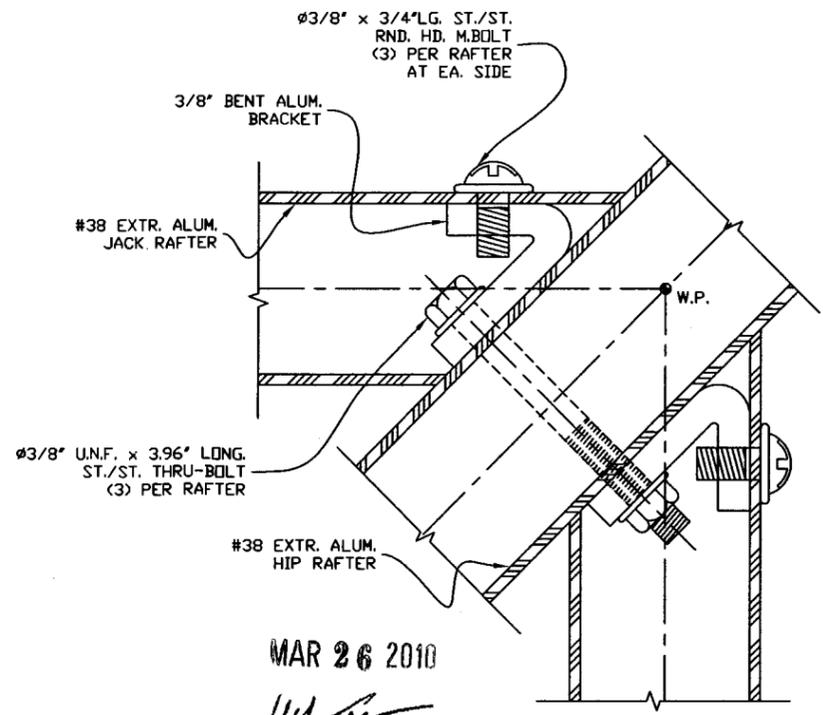
(2) JACK RAFTERS DETAIL
SCALE: FULL



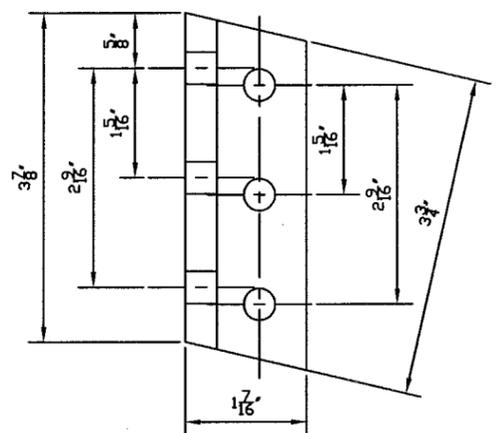
3/8" C-CHANNEL ALUM BRACKET
SCALE: FULL



(1) COMP. RING DETAIL
SCALE: FULL



(3) RAFTER/HIP CONNECTION DETAIL
SCALE: FULL

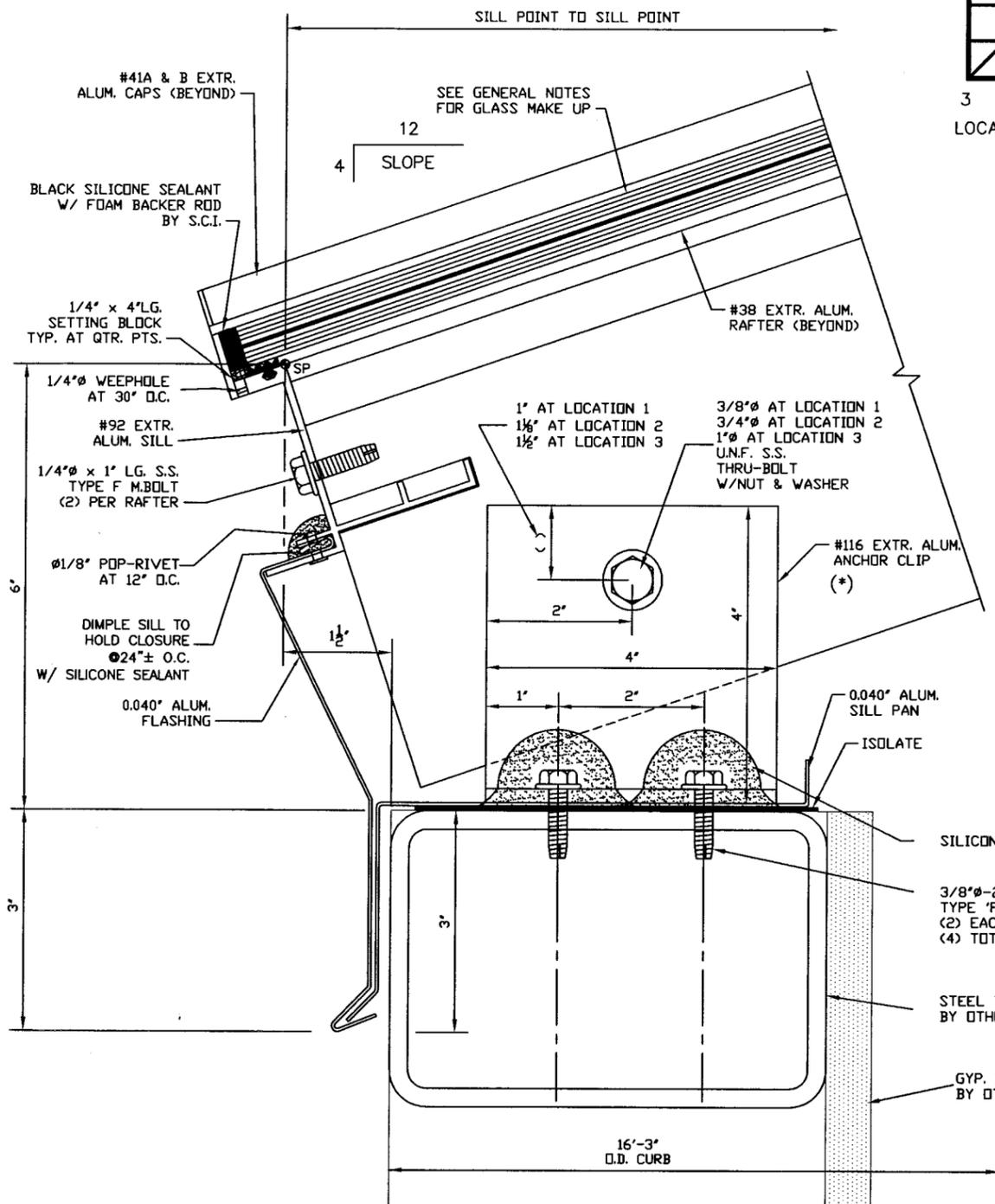
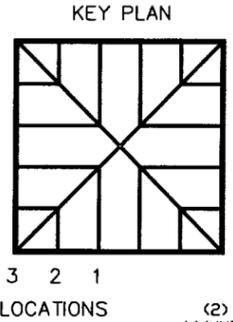


3/8" BENT ALUM. BRACKET
SCALE: FULL

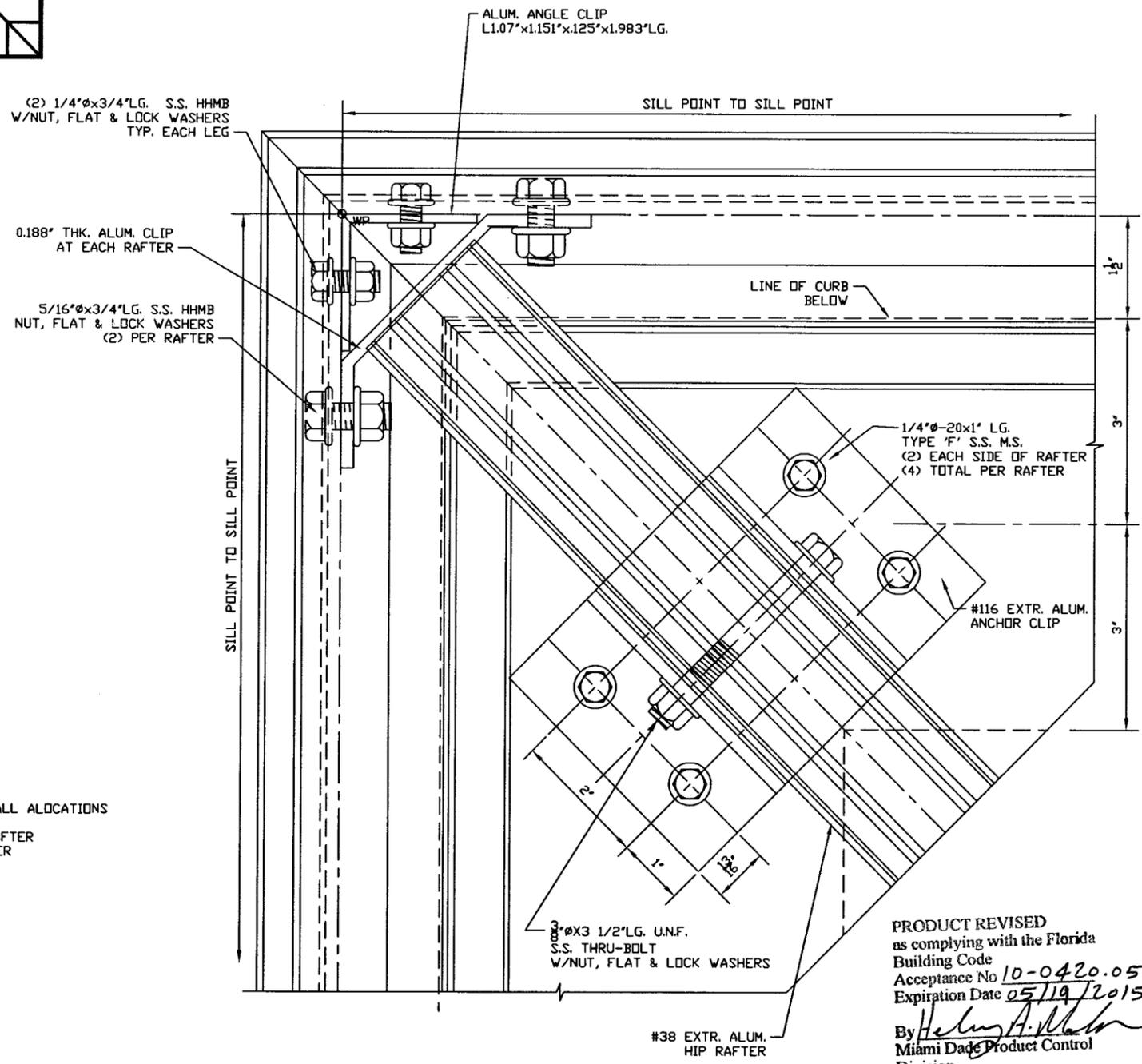
PRODUCT REVISED as complying with the Florida Building Code Acceptance No. 10-0420-05 Expiration Date 05/19/2015

By *Helmut A. Weber*
Miami Dade Product Control Division

| | | | | | | | | |
|-------------|------------------|------------|---|--|---------|------------|--|--------------------------|
| SHEET NO. 6 | DRAWN BY MARK M. | CHECKED BY | DATE 04-25-06 | JOB NO. 301-TEST | DETAILS | PRODUCTION | OPERATIONS | QUALITY CONTROL |
| | | | | | | | SENTECH CONSULTANTS, LLC 2925 Pergamon Valley Trail Austin, TX 78732 Phone: 512-266-7045 Fax: 512-266-3844 www.sentechnas.com | TEST UNIT |
| OF 7 | | | | CONTRACTOR METCOE SKYLIGHT SPECIALTY CO., INC. | | | JOB NAME | ADDRESS DADE COUNTY, FL. |
| | | | 1715 WEST 135th STREET GARDENA, CA 90249 PHONE 310/354-0030 FAX 310/523-5803 WWW.METCOE.COM | | | | | |



1 SILL DETAIL
6 SCALE: FULL
ARCH. REF.: .



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By *Helmut A. Walter*
Miami Dade Product Control Division

MAR 26 2010

2 CORNER DETAIL
6 SCALE: FULL
ARCH. REF.: .

* The anchor size, perimeter bracket size, and perimeter connection bolt sizes are only required for +75psf and - 85psf design loads. Actual bracket size, connection bolt size, and anchor bolt size will vary with each application.

| | | | |
|---------------------------|-----------------|--|------------|
| DRAWN BY MARK M. | CHECKED BY | DATE | 04-25-06 |
| | | | 04-25-06 |
| JOB NO. | 301-TEST | DETAIL | PLAN/NOTES |
| REVISIONS | BY | DATE | |
| | | 9/7/06 | |
| | | 8/30/07 | |
| SENTTECH CONSULTANTS, LLC | | 1715 WEST 135th STREET GARDENA CA 90248 METCOE PHONE 310/354-0030 METCOE FAX 310/523-5803 WWW.METCOE.COM | |
| CONTRACTOR | | METCOE SKYLIGHT SPECIALTY CO., INC | |
| JOB NAME | | TEST UNIT | |
| ADDRESS | | DADE COUNTY, FL. | |
| OPERATIONS | QUALITY CONTROL | | |

