BUILDING CODE COMPLIANCE OFFICE

METRO-DEDE FLAGIER BUILDING 140 WEST FLAGLER STREET, SUITE 1603 MIAMI, FLORIDA 33130-1568 --(305) 375-2901 FAX (305) 375-2908

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

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

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

PRODUCT CONTROL NOTICE OF ACCEPTANCE

Premdor Entry Systems 911 E. Jeferson, P.O. Box 76 Pittsburgh, KS 66762

Your application for Notice of Acceptance (NOA) of:

Entergy 6-8 S/E Inswing Opaque Double w/sidelites Residential Insulated Steel Door 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.: 01-0314.23

EXPIRES: 04/02/2006

Raul Kodriguez

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.

Prancisco / Quintesa

Director

Miami-Dade County

Building Code Compliance Office

APPROVED: 06/05/2001

Premdor Entry Systems

ACCEPTANCE No:

01-0314.23

APPROVED

JUN 0 5 200

EXPIRES

April 02, 2006

NOTICE OF ACCEPTANCE: SPECIFIC CONDITIONS

1. SCOPE

This renews the Notice of Acceptance No. 00-0321.25 which was issued on April 28, 2000. It 1.1 approves a residential insulated door, as described in Section 2 of this Notice of Acceptance, designed to comply with the South Florida Building Code (SFBC), 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.

PRODUCT DESCRIPTION 2.

The Series Entergy 6-8 S/E Inswing Opaque Double Residential Insulated Steel Doors with 2.1 Sidelites-Impact Resistant Door Slab Only and its components shall be constructed in strict compliance with the following documents: Drawing No 31-1029-EM-I, Sheets 1 through 6 of 6, titled "Premdor (Entergy Brand) Double Door with Sidelites in Wood Frames with Bumper Threshold (Inswing)," prepared by manufacturer, dated 7/29/97 with revision C dated 01/11/00, 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

- This approval applies to single unit applications of pair of doors and single door only, as shown in approved drawings. Single door units shall include all components described in the active leaf of
- 3.2 Unit shall be installed only at locations protected by a canopy or overhang such that the angle between the edge of canopy or overhang to sill is less than 45 degrees. Unless unit is installed in non-habitable areas where the unit and the area are designed to accept water infiltration. 4.

INSTALLATION

- The residential insulated steel door and its components shall be installed in strict compliance with 4.1 4.2
- Hurricane protection system (shutters):
 - 4.2.1 Door: the installation of this unit will not require a hurricane protection system.
 - 4.2.2 Sidelite: the installation of this unit will require a hurricane protection system.

5.

- Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and 5.1 following statement: "Miami-Dade County Product Control Approved". 6.
- BUILDING PERMIT REQUIREMENTS
- Application for building permit shall be accompanied by copies of the following: 6.1
 - This Notice of Acceptance
 - Duplicate copies of the approved drawings, as identified in Section 2 of this Notice of 6.1.2 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

Manuel Perez, P.E. Product Coptrol Examiner Product Control Division

Premdor Entry Systems

ACCEPTANCE No.

01-0314.23

APPROVED

JUN 0 5-2001

EXPIRES

April 02, 2006

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 documentation, 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 scaled 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:

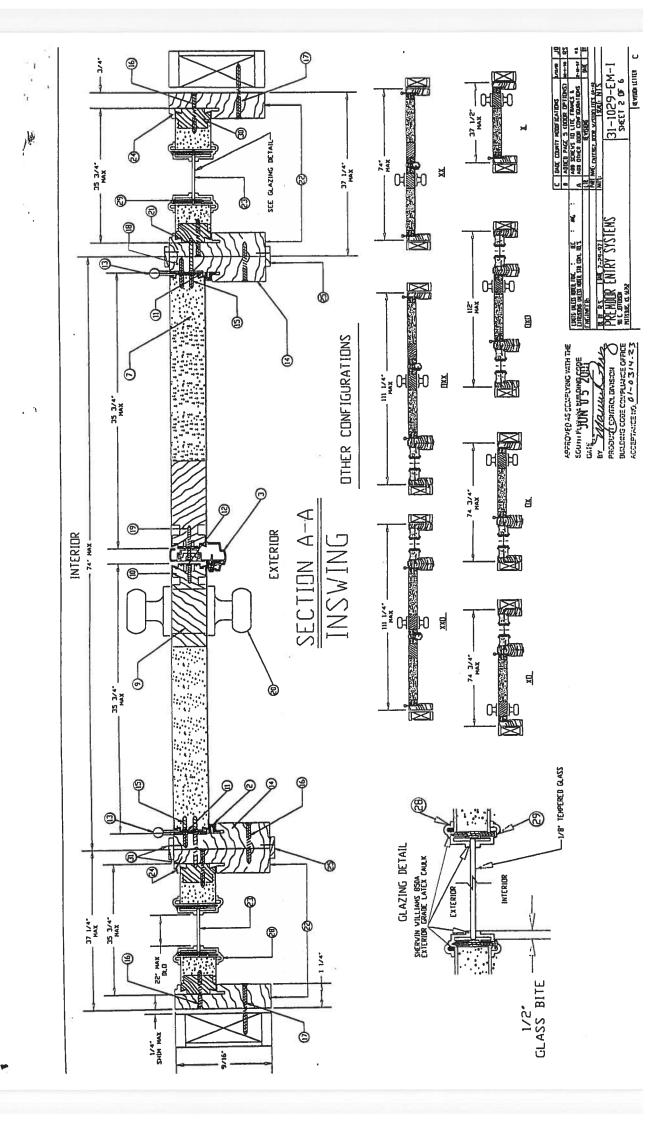
a. Unsatisfactory performance of this product or process.

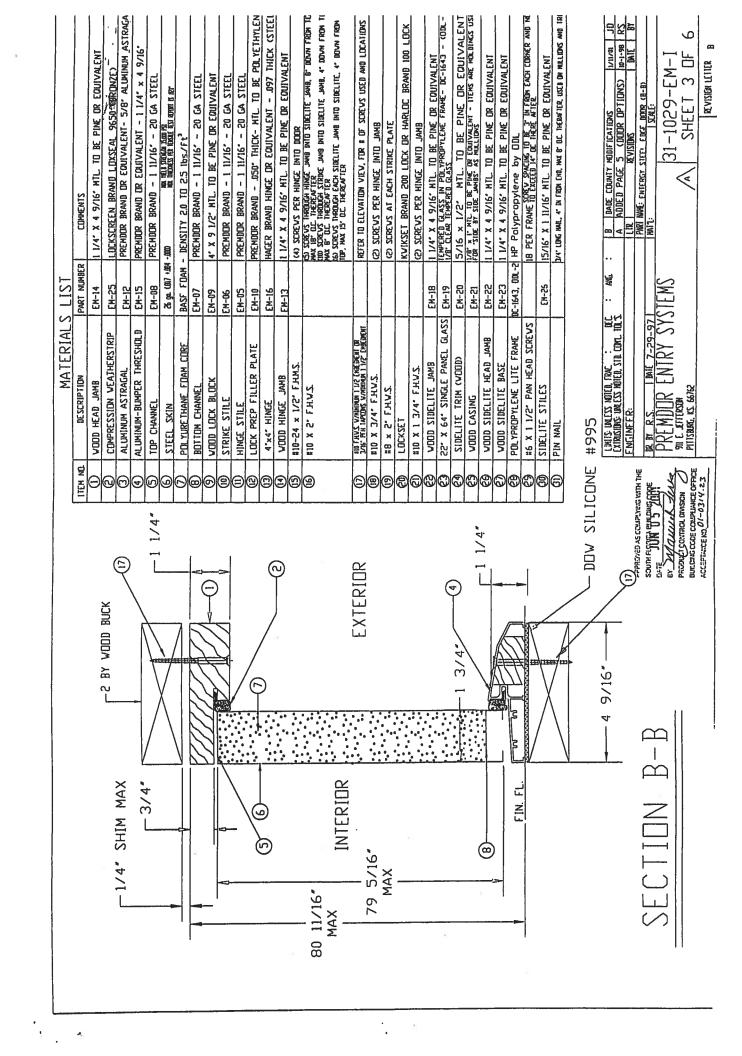
- b. Misuse of this Acceptance as an endorsement of any product, for sales, advertising or any other purposes.
- 6. The Notice of Acceptance number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the Notice 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.

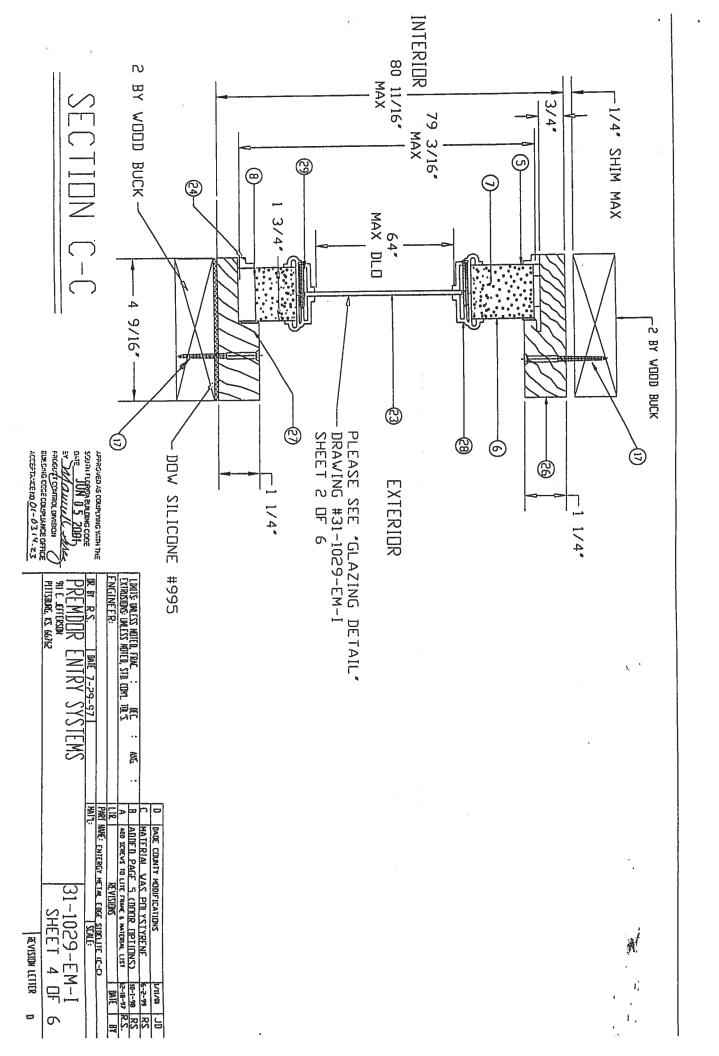
END OF THIS ACCEPTANCE

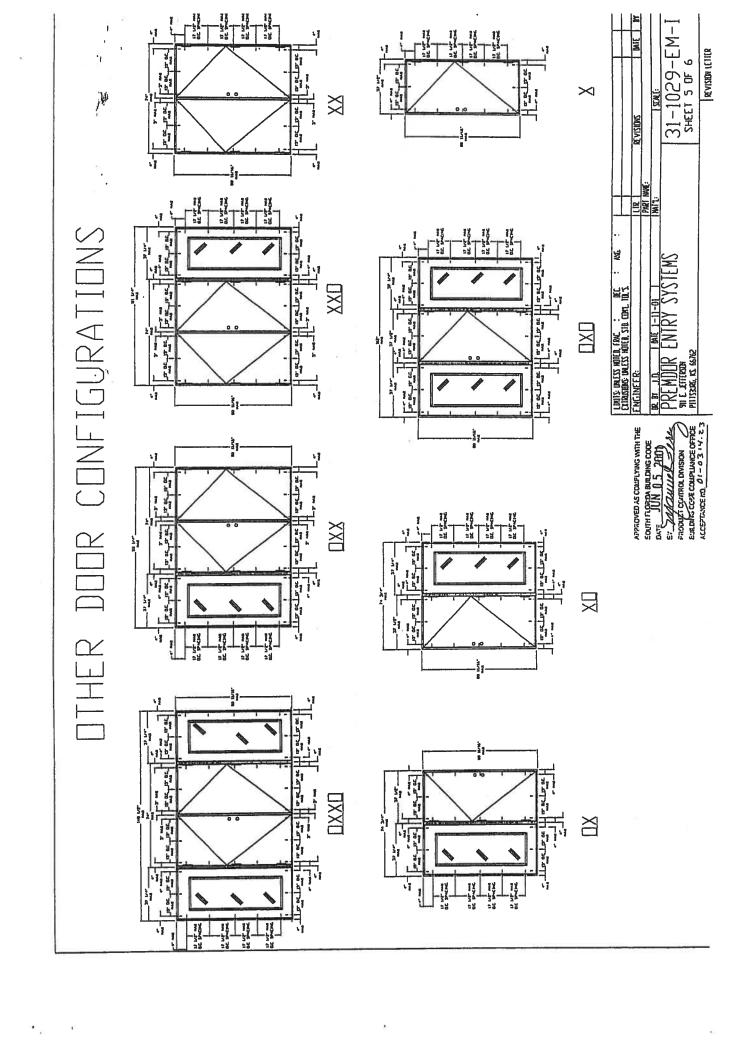
Manuel Perez, P.E., Product Control Examiner

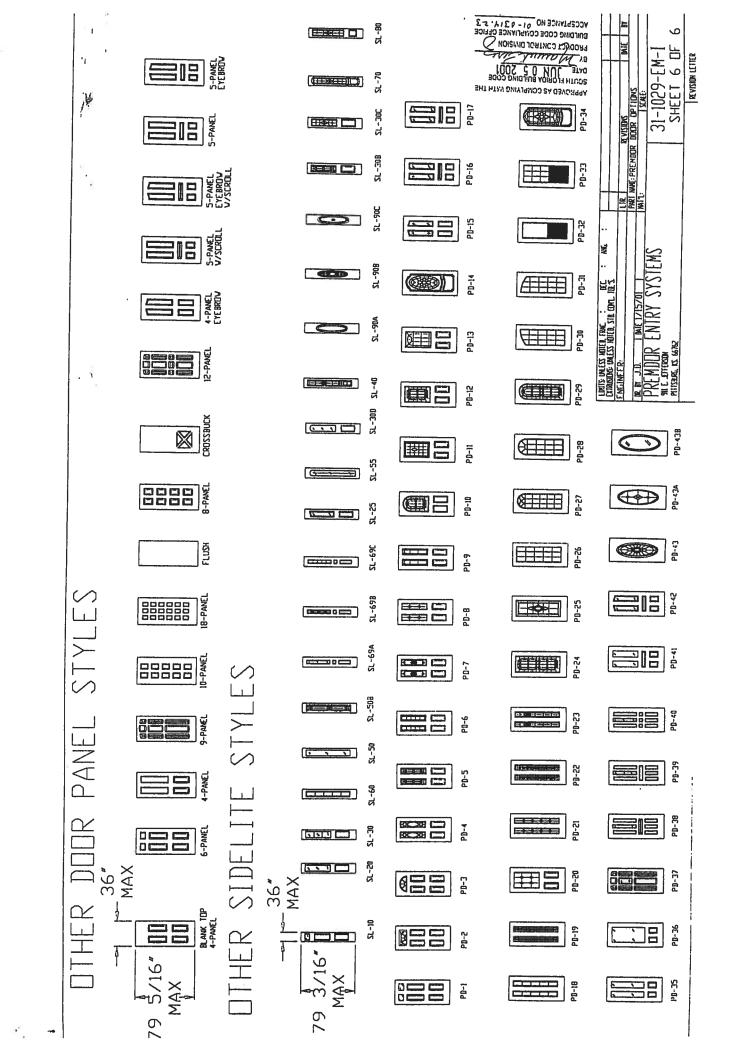
Product Control Division

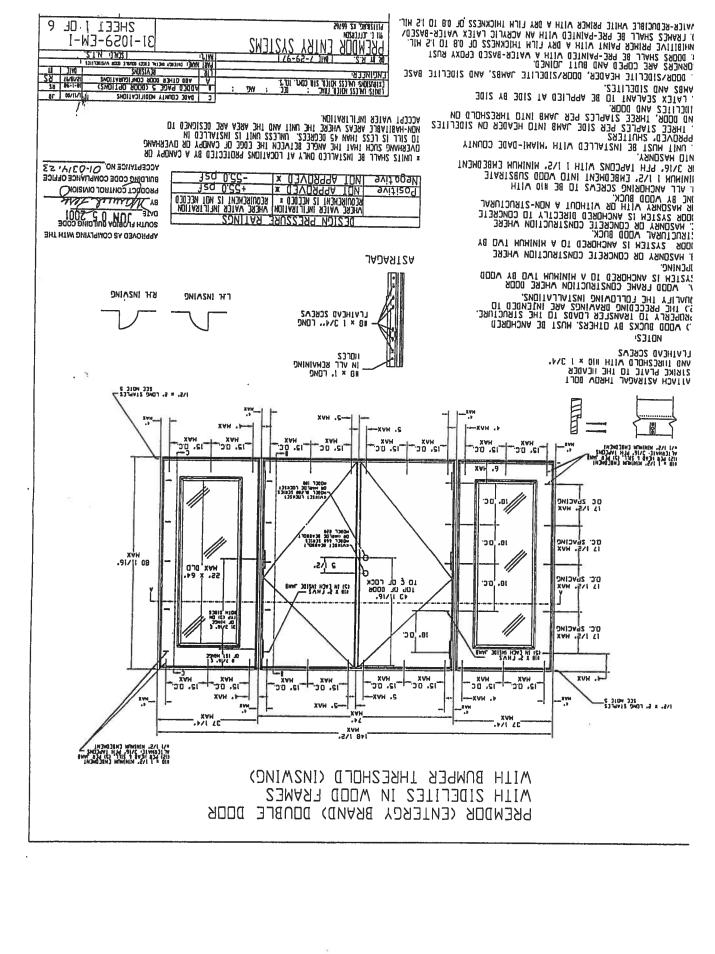


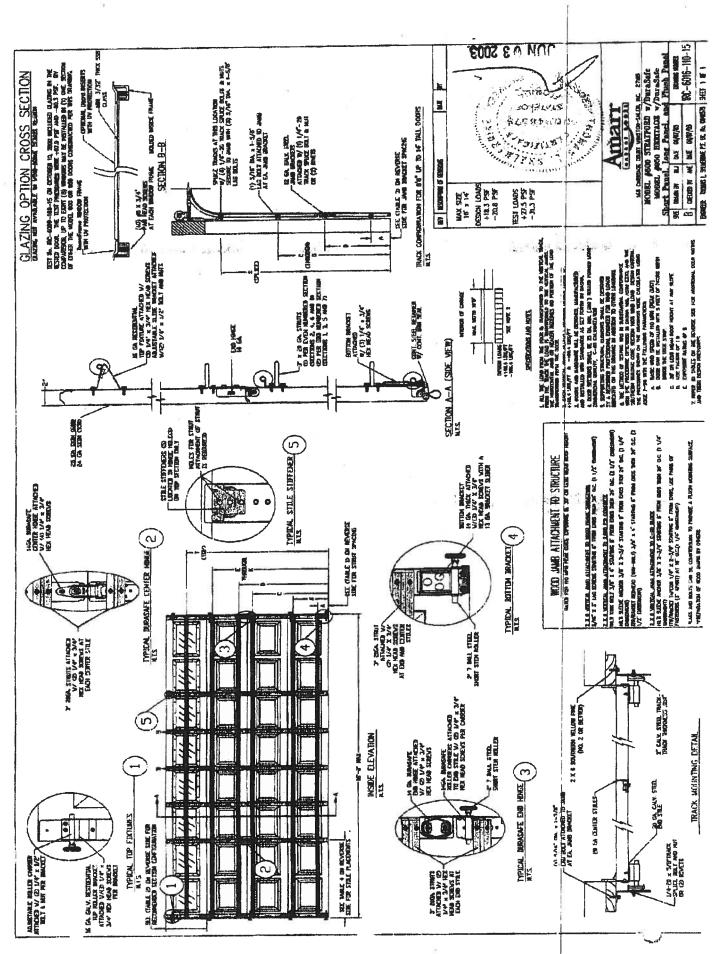














March 6, 2002

Subject: Elk Product Approval Information

All Prestique® and Capstone® products manufactured in Tuscaloosa, AL are certified under the Miami – Dade County Building Code Office (BCCO). These products also meet the requirements for the Florida Building Code since they are MD approved. The following test protocols must be passed by each of the products in order for MD product certification:

ASTM D3462

PA 100 (110 mph uplift and wind driven rain resistance)

PA 107 (Modified ASTM D3161 - 110 mph wind uplift resistance)

The nailing patterns that were used during the PA 100 and PA 107 wind test protocols for the Prestique and Capstone products are listed below. Also listed below are the Miami – Dade Notice of Acceptance Numbers (NOA).

Raised Profile, Prestique High Definition, Prestique 25, or Prestique 30 -

PA 100 = 4 nails

PA 107 = 5 nails

MD NOA# = 01-1226.04

Prestique I 35 or Prestique I* -

PA 100 = 4 nails

PA 107 = 5 nails

MD NOA# = 01-1226.05

Prestique Plus or Prestique Gallery Collection* -

PA 100 = 4 nails

PA 107 = 4 nails

MD NOA# = 01-1226.03

Capstone*

PA 100 = 4 Nails

PA 107 = 4 Nails

MD NOA# = 01-0523.01

* As per the Elk Limited Warranty, six nails are required for the Elk high wind warranty.

If there are any questions please contact:

Mike Reed - Technical Manager

or

Daniel DeJamette - QA Engineer

(205) 342-0287

(205) 342-0298

ROOFING PRODUCTS SPECIFICATIONS - TUSCALOOSA, AL



PRESTIQUE® HIGH DEFINITION®

第 指 计计划



RAISED PROFILE™

High Definition

Product size 13¼"x 39 %" Exposure 5%" Pieces/Bundle 16 Bundles/Square 4/98.5 sq.ft. Squares/Pallet 11

50-year limited warranty period: non-prorated coverage for shingles and application labor for the initial 5 years, plus an option for transferability*; prorated coverage for application labor and shingles for balance of limited warranty period; 5-year limited wind warranty*.

Product size 13%"x 38%" 5%" Exposure Pieces/Bundle 22 Bundles/Square 3/100 sq.ft. Squares/Pallet 16

30-year limited warranty period: non-prorated coverage for shingles and application labor for the initial 5 years, plus an option for transferability*; prorated coverage for application labor and shingles for balance of limited warranty period; 5-year limited wind warranty*.

High Definition

13%"x 39%" Product size Exposure 5%" Pieces/Bundle 16 Bundles/Square

Squares/Pallet

4/98.5 sq.ft. 14

40-year limited warranty period. non-prorated coverage for ison-prorated coverage for shingles and application labor for the initial 5 years, plus an option for transferability*; prorated coverage for application labor and shingles for believes shingles for balance of limited warranty period; 5-year limited wind warranty*.

HIP AND RIDGE SHINGLES

Size: 12"x 12" Exposure: 61/4" Pieces/Bundle: 45

Coverage: 4 Bundles = 100 linear feet

High Definition

Product size 13%"x 38%" Exposure 5%" Pieces/Bundle 22

3/100 sq.ft. Bundles/Square Squares/Pallet 16

30-year limited warranty period: non-prorated coverage for shingles and application labor for the initial 5 years, plus an option for transferability*; prorated coverage for application labor and shingles for balance of limited warranty period; 5-year limited wind warranty".

52 Bundles/Pallet 18 Pallets/Truck 936 Bundles/Truck 19 Pieces/Bundle

1 Bundle = 120.33 linear feet

Available Colors: Antique Slate, Weatheredwood, Shakewood, Sablewood, Hickory, Barkwood**, Forest Green, Wedgewood**, Birchwood**, Sandalwood. Gallery Collection: Balsam Forest*, Weathered Sage*, Sienna Sunset*.

All Prestique, Raised Profile and Seal-A-Ridge roofing products contain Elk WindGuard® sealant. WindGuard activates with the sun's heat, bonding shingles into a wind and weather resistant cover that resists blow-offs and leaks.

Check for availability with built-in StainGuard® treatment to inhibit the discoloration of roofing granules caused by the growth of certain types of algae. Not available in Sablewood.

All Prestique and Raised Profile shingles meet UL® Wind Resistant (UL 997) and Class "A" Fire Ratings (UL 790); and ASTM Specifications D 3018, Type-I; D 3161, Type-I; E 108 and the requirements of ASTM D 3462.

All Prestique and Raised Profile shingles meet the latest Metro Dade building code requirements.

*See actual limited warranty for conditions and limitations.
**Check for product availability.

Score: Work includes furnishing all labor, materials and equipment necessary to complete installation of (name) shingles specified herein. Color shall be (name of color). Hip and ridge type to be Elk Seal-A-Ridge with formula FLX.

Carrier comme

All exposed metal surfaces (flashing, vents, etc.) to be painted with matching Elk roof accessory paint.

PREMARATION OF ROOF DECK: Roof deck to be dry, well-seasoned 1" x 6" (25.4mm x 152.4mm) boards; exterior-grade plywood (exposure 1 rated sheathing) at least 3/8" (9.525mm) thick conforming to the specifications of the American Plywood Association; 7/16" (11.074mm) oriented strandboard; or chipboard. Most fire retardant plywood decks are NOT approved substrates for Elk shingles. Consult Elk Field Service for application specifications over other decks and other slopes.

MATERIALS: Underlayment for standard roof slopes, 4° per foot (101.6/304.8mm) or greater: apply non-perforated No. 15 or 30 asphalt-saturated felt underlayment. For low slopes (4° per foot (101.6/304.8mm)) to a minimum of 2′ per foot (50.8/304.8mm)), use two plies of underlayment overlapped a minimum of 19°. Fasteners shall be of sufficient length and holding power for securing material as required by the application instructions printed on shingle wrapper.

For areas where algae is a problem, shingles shall be (name) with StainGuard treatment, as manufactured by the Elik Tuscaloosa plant. Hip and ridge type to be Seal-A-Ridge with formula FLX with StainGuard treatment.

Complete application instructions are published by Elk and printed on the back of every shingle bundle. All

warranties are contingent upon the correct installation as shown on the instructions. These instructions are the as snown on the instructions. These instructions are the minimum required to meet Elk application requirements. In some areas, building codes may require additional application techniques or methods beyond our instructions. In these cases, the local code must be followed. Under no circumstances will Elk accept application requirements less than those contained in its application instructions.

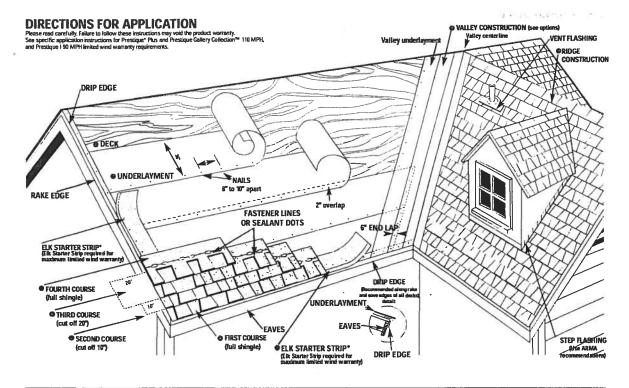
For specifications in CSI format, call 800.354.SPEC (7732) or e-mail specinfo@elkcorp.com

SOUTHEAST & ATLANTIC OFFICE: 800.945.5551

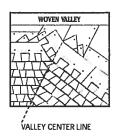
CORPORATE HEADQUARTERS: 800.354.7732

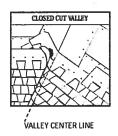
PLANT LOCATION: 800.945.5545





♥ VALLEY CONSTRUCTION OPTION (California Open and California Closed are also acceptable) NOTE: For complete ARMA valley installation details, see ARMA Residential Asphalt Roofing Manual.







DIRECTIONS FOR APPLICATION

These application instructions are the minimum required to meet Elk's application requirements, Your failure to follow these instructions may void the product warranty. In some areas, the building codes may require additional application techniques or methods beyond our instructions in these cases, the local code must be followed. Under no circumstances will Elk accept application requirements that are less then those printed here. Stringles should not be jammed tightly together. All attics should be properly ventilated. Note: If is not necessary to remove tape on back of shingle.

O DECK PREPARATION

Roof decks should be dry, well-seasoned 1° x 6° boards or exterior grade plywood minimum 3/8° thick and conform to the specifications of the American Plywood Association or 7/16° chipboard.

9 UNDERLAYMENT

Apply underlayment (Non-Perforated No. 15 or 30 asphalt saturated felt). Cover drip edge at sewes only. For low slope (2/12 up to 4/12), completely cover the deck with two plies of underlayment overtapping a minimum of 19°. Begin by lastening a 19° wide strip of underlayment placed along the sewes. Place a Inila 36° wide sheet over the starter, horizontally placed along the eaves and completely overlapping the starter strip.

EAVE FLASHING FOR ICE DAMS (ASK A ROOFING CONTRACTOR, REFER TO ARMA MANUAL OR CHECK LOCAL CODES)

For standard slope (4/12 to less than 21/12), use coated roll roofing of no less than 50 pounds over the felt undertayment extending from the eave edge to a point at least 24' beyond the inside wall of the living space below or one layer of a self-adhered eave and flashing membrane.

The for low slope (2/12 up to 4/12), use a continuous layer of asphalt plastic cement between the two piles of underfayment from the eave edge up roof to a point at least 2/f beyond the inside wall of the living space bel

Consult the Elk Field Service Department for application specifications over other decks and other slopes.

STARTER SHINGLE COURSE

USE AN ELK STARTER STRIP OR A STRIP SHINGLE INVERTED WITH THE HEADLAP APPLED AT THE EAVE EDGE. With at least 4' trimmed from the end of the first shingle, start at the rake edge overtanging the eave 1/2' to 3/4'. Fasten 2' from the lower edge and 1' from each side. Shingles may be applied with a course alignment of 45" on the roof.

O FIRST COURSE

Start at rake and continue course with full shingles laid flush with the starter course.

⊕ SECOND COURSE

Start at the rake with the shingle having 10° trimmed off and continue across roof with full shingles.

THIRD COURSE

Start at the rake with the shingle having 20° trimmed off and continue across roof with full shingles.

O FOURTH COURSE

Start at the rake and continue with full shingles across roof.

FIFTH AND SUCCEEDING COURSES.

Repeat application as shown for second, third, and fourth courses. Do not rack shingles straight up the roof.

O VALLEY CONSTRUCTION

OVALLEY CONSTRUCTION
Open, woven and closed cut valleys are acceptable when applied
by Asphalt Roofing Manufacturing Association (ARMA)
recommended procedures. For metal valleys, use 35 wide vertical
underlayment prior to applying 18" metal flashing (secure edge
with nafis). No nails are to be within 6" of valley center.

9 RIDGE CONSTRUCTION

For ridge construction use Class "A" Seal-A-Ridge" with formula FIX " (See ridge package for installation instructions.)

FASTENERS

While nailing is the preferred method for Elk shingles, Elk will accept fastering methods according to the following instructions.

Always nail or staple through the fastener line or on products without fastener lines, nail or staple between and in fine with sealant dots.

NAILS: Corrosive resistant, 3/6" head, minimum 12-gauge roofing nails. Elk recommends 1-1/4" for new roofs and 1-1/2" for roof-overs. In cases where you are applying shingles to a roof that has an exposed overhang for new roofs only, 3/4" ring shank nails are allowed to be used from the serve's edge to a point up the roof that is past the outside wall line. I" ring shank nails allowed for re-roof. STAPLES: Corrosive resistant, 16-gauge minimum, crown width minimum of 15/16*. Note: An improperty adjusted staple gun can result in raised staples that can cause a fish-mouthed appearance and can prevent sealing.

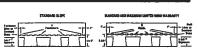
Fasteners should be long enough to obtain 3/4" deck penetration or penetration through deck, whichever is less.

MANSARD APPLICATIONS

Correct fastening is critical to the performance of the roof. For slopes exceeding 60 for 2/1/2) use six fasteners per shipple. Locate fasteners in the fastener area if from each side edge with the remaining four fasteners equally spaced along the length of the double thickness (laminated) area. Only fastening methods according to the above instructions are acceptable.

LIMITED WIND WARRANTY

- For a Limited Wind Warranty, all Prestique and Raised Profile shingles must be applied with 4 property placed fasteners, or in the case of mansard applications, 6 property placed fasteners per shingle.
- For a Limited Wind Warranty up to 110 MPH for Prestique Gallery Collection or Prestique Plus or 90 MPH for Prestique; shingles must be applied with 5 properly placed NAILS per shingle. SHINGLES APPLIED WITH STAPLES WILL NOT QUALIFY FOR THIS ENHANCED LIMITED WIND WARRANTY. QUALIFY FOR THIS ENHANCED UNITED WIND WARRANTY.
 ANS, EIK STATES Tyrip shingles must be applied at the eaves and rake edges to qualify Prestique Plus, Prestique Gallery Collection and Prestique I shingles for this enhanced Limited Wind Warranty. Under no circumstances should the Elk States Shingles or the Elk States Ship overhang the eaves or rake edge more than 3/4 of an Inch.



HELP STOP BLOW-OFFS AND CALL-BACKS

A minimum of four fasteners must be driven into the DOUBLE THICKNESS (laminated) area of the shingle. Nails or stajes must be placed along – and through – the Tastener line* or on products without fastener lines, sall or staple between and line with sealant dots. CAUTION: Do not use fastener line for



Refer to local codes which in some areas may require specific application techniques beyond those Elik has specified. All Prestitipe and Raised Profile shingles have a UL® Wind Resistance Rating when applied in accordance with these instructions using nails or staples on re-roofs as well as new construction.

CAUTION TO WHOLESALER: Careless and improper storage or handling can harm fiberglass shingles. Keep these shingles completely covered, dry, reasonably cool, and protected from the weather. Do not store near various sources of heat. Do not store in direct sunlight until applied. Do NOT DOUBLE STACK. Systematically rotate all stock so that the material that has been stored the longest will be the first to be moved out.

2002 Elk Corporation of Dallas.

All tradometics, ©, are registered tradements of Elk Corporation of Dellas, an ELCOR conpany. Raised Profile. Registrest, Gallery Collection and FLV are tradements pending registration of Elk Corporation of Dallas, UL is a registered tradement of Underwriters Laboratories. Inc.



March 4, 2002

GAF Materials Corporation Mr Randall Ziegler 1361 Alps Road Wayne, NJ 07470

Our Reference: R21

Subject: UL Listed products

Door Mr Ziegler:

This is is response to your request to identify some of the products that are curently Listed with Underwriters Laboratories relating to various Standards. Following are those products:

Royal Sovereign® Marquis D. Marquis D. Weather Max D. SLATELINEO Grand carryon TN Grand Sequois® Country Mansion TM Country Estates TH Timberline 3074 Timberline Select™ 40 Timberline UltraTM Sentinel®

The above products have been tested to ASTM D3462, Class A UL790/ASTM E108 and UL 997/ ASTM D3161 (secured with 4 nails) with velocities up to 110 mph and have successfully met those test criteria.

If you have any questions please feel free to contact the writer.

Very truly yours.

Reviewed by,

Kyer Crodeson Roger Anderson (Ext. 43283)

Senior Engineering Associate

Conformity Assessment Services- 301 IE-NBK

Douglas C. Miller (Ext. 43262)

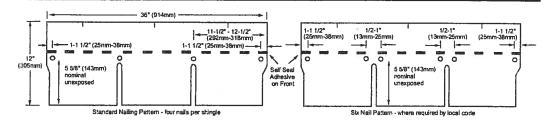
Engineering Group Leader

Conformity Assessment Services- 301 IE-NBK



APPLICATION INSTRUCTIONS

Note: These shingles must be nailed a nominal 5 5/8" (143mm) from bottom of shingles, not in or above self seal, as shown. Nails should remain unexposed.



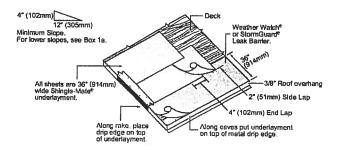
GENERAL INSTRUCTIONS

• ROOF DECKS: For use on new or reroofing work over well-seasoned, supported wood deck, tightly-constructed with maximum 6" (152mm) wide lumber, having adequate nail-holding capacity and smooth surface. Plywood decking as recommended by The Engineered Wood Assn. is acceptable. Plywood decks for Class A installations must be 3/8" (10mm) thick or greater with underlayments as noted below. Shingles must not be fastened directly to insulation or insulated deck unless authorized in writing by GAF Materials Corporation. Roof decks and existing surfacing material must be dry prior to application of shingles.
• UNDERLAYMENT: Underlayment is required on new construction and required for reroofing when old roof is removed from the deck. Use only "breather type" material like GAF Materials Corporation Shingle-Mate" Underlayment or equivalent. Underlayment must be installed flat, without wrinkles.
• FASTENERS: Use of nails is recommended. (Staple specifications and application instructions are available from GAF Materials Corporation, Contractor Services Dept., 1361 Alps Road, Wayne, NJ 07470.) Use only zinc coated steel or aluminum, 10-12 gauge, barbed, deformed or smooth shank roofing nails with heads 3/8" (10mm) to 7/16" (12mm) in diameter. Fasteners should be long enough to penetrate at least 3/4" (19mm) into wood decks or just through the plywood decks. Fasteners must be driven flush with the surface of the shingle. Over driving will damage the shingle. Raised fasteners will interfere with the sealing of the shingles. For normal installation, four fasteners must be installed per shingle, a norminal 5 5/8" (143mm) up from the bottom of the shingle. Fasteners must be installed approximately 1". 1 1/2" (25-38mm) and 11 1/2". 12 1/2" (292-318mm) from each side.

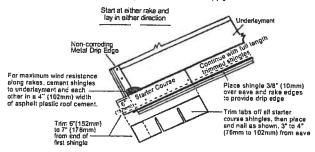
• WIND RESISTANT: These shingles have a special thermal sealant that firmly bonds the shingles together after application when exposed to sun and warm temperatures. Shingles installed in Fall or Winter may not seal until the following Spring. If shingles are damag

Underlayment: Standard Slope—4/12 (333mm/m) or more
Application of underlayment: Cover deck with one layer of underlayment installed without
wrinkles. Use only enough nails to hold underlayment in place until covered by shingles.

Application of eave flashing: Install eave flashing such as GAF Materials Corporation Weather
Watch* or StormGuard* Leak Barrier in localities where leaks may be caused by water backing
up behind ice or debris dams. Eave flashing must overhang the roof edge by 3/8* (10mm) and
extend 24* (610mm) beyond the inside wall line.



Starter Course Use of any GAF MC 3-tab Shingle is recommended. Apply as shown.



apply 2 quarter-sized dabs of shingle tab adhesive on the back of each tab, approximately 1" (25mm) from end and 1" (25mm) up from bottom of each tab corner. The shingle must be pressed firmly into the adhesive. NOTE: Application of excess tab adhesive can cause blistering of the shingle.

For maximum wind resistance along rakes, cement shingles to underlayment and each other in a 4" (102mm) width of asphalt plastic roof cement.

NOTE: The film strips on the back of each shingle are to prevent sticking together of the shingles while in the bundle. Their removal is NOT required during application.

**CANADIAN COLD WEATHER APPLICATIONS: CSA A123.5-M90 mandates that shingles applied between September 1 and April 30 shall be adhered with a compatible field-applied adhesive. See Wind Resistant for GAF Materials Corporation's recommendations for the application of the adherity.

• MANSARD AND STEEP SLOPE APPLICATIONS: For roof slopes greater than 21* (1750mm/m) per foot (do NOT use on vertical side walls), shingle sealing must be enhanced by hand sealing. After fastening the shingle in place, apply 2 quarter-sized dabs of shingle tab adhesive as indicated in Wind Resistant above. The shingle must be pressed

Shingle tab adnessive as indicated in white resistant above. The shingle must be pressed firmly into the adhesive.

• EXPOSURE: 5" (127mm)

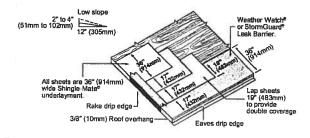
• THROUGH VENTILATION: All roof structures must be provided with through ventilation to prevent entrapment of moisture laden air behind roof sheathing. Ventilation provisions must at least meet or exceed current F.H.A., H.U.D. or local code minimum requirements.

• NON-CORRODING METAL DRIP EDGES: Recommended along rake and eave edges and liderke separalially alwayard decks.

on all decks, especially plywood decks.

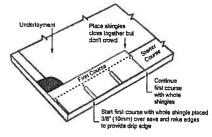
• ASPHALT PLASTIC CEMENT: For use as shingle tab adhesive. Must conform to ASTM D4586 Type I or II.

1a Underlayment: Low Slope 2/12-4/12 (167mm-333mm/m)
Application of underlayment and eave flashing: Completely cover the deck with two
layers of underlayment as shown. Use only enough nails to hold underlayment in
place until covered by shingles. Use blind nailing for eave flashings. At eaves and where ice
dams can be expected, use one layer of GAF Materials Corporation Weather Watch" or
StormGuard" Leak Barrier. Eave flashing must overhang the roof edge by 3/8" (10mm) and
extend 24" (610mm) beyond the inside wall line. Where ice dams or debris dams are not
expected, install 2 piles of Shingle-Mate" underlayment.



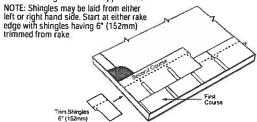
First Course

Start and continue with full shingles laid flush with the starter course. Shingles may be laid from left to right or right to left. DO NOT lay shingles straight up the roof since this procedure can cause an incorrect color blend on the roof and may damage the shingles.

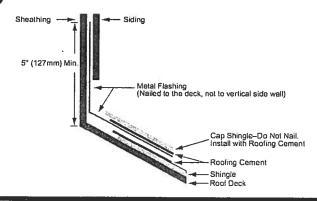


Second Course

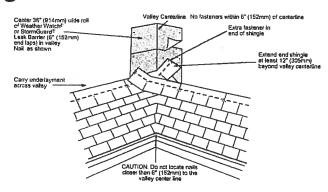
Start and continue second course and all even numbered courses as shown. Position the shingle on the top of the cutouts of the underlying shingle so that there will be 5* (127mm) of each shingle exposed. Strike a chalk line about every 6 courses to check parallel alignment with eaves. Factory applied self-sealing dots on lower courses are designed to seal down the shingle tabs in an upper course.



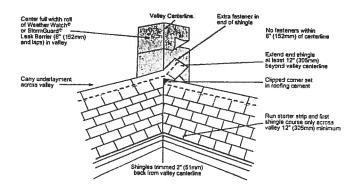
Wall Flashing (Sloped Roof to Vertical Wall)



Valley Construction - Closed or Woven Valley

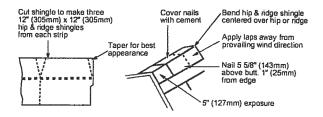


10 Valley Construction-Closed Cut

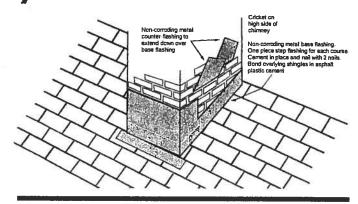


Hip and Ridge

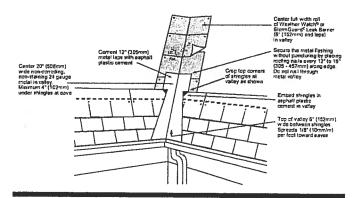
Use CAF hip & ridge shingles, or cut hip & ridge shingles from these full shingles, and apply as shown. Position laps away from prevailing wind direction.



Chimney Flashing



Valley Construction-Open Cut



These shingles are fiberglass, self-sealing asphalt shingles. Because of the natural characteristics of the high quality waterproofing material used, these shingles will be stiff in cold weather and flexible in hot weather.

- Bundles should not be dropped on edge nor should attempt be made to separate shingles by "breaking" over ridge or other bundles.
 Handle carefully. Shingles can easily be broken in cold weather or their edges damaged in bot mether.
- hot weather.

hot weather.

3. All exposed materials must be of Class A type.

4. Storage should be in a covered, ventilated area—maximum temperature 110°F (43°C.) Store on flat surface and use weight equalization boards if pallets are to be double stacked. Shingles must be protected from weather when stored at job site. Do not store near steam pipes, radiators, etc., or in sunlight. All rolled product must be stored on ends.

5. If shingles are to be applied during PROLONGED COLD periods or in areas where airborne dust or sand can be expected before sealing occurs, the shingles MUST be hand sealed. See

Wind Resistant instructions.

Re-Roofing
If old asphalt shingles are to remain in place, nail down or cut away all loose, curled or lifted shingles; replace with new; and just before applying the new roofing, sweep the surface clean of all loose debris. Since any irregularities may show through the new shingles, be sure the underlying shingles provide a smooth surface. Fasteners must be of sufficient length to penetrate the wood deck at least 3/4* (19mm) or just through plywood. Follow other above instructions for application. Note. Shingles can be applied over wood shingles when precautions have been taken to provide an acceptable smooth surface. This includes cutting back old shingles at eaves and rakes and installing new wood edging strips as needed. Make surface smooth and use beveled wood strips if necessary. Install #30 underlayment to maintain Class A rating. strips if necessary. Install #30 underlayment to maintain Class A rating.

This product is sold with an express LIMITED WARRANTY only. A copy of the LIMITED WARRANTY stating its terms and restrictions is printed on the product wrapper or may be obtained from the distributor of this product or directly from GAF Materials Corporation. Any deviation from printed instructions shall be the responsibility of applicator and/or specifier.

©2000 GAF Materials Corporation

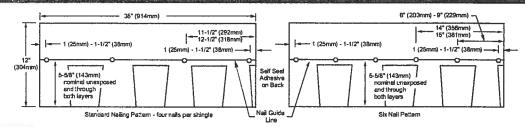


IMBERLI

APPLICATION INSTRUCTIONS

Timberline^c Series shingles come in either 36" (914mm) or 36-15/16" (938mm) lengths, depending on shingle brand. Application instructions apply to both.

These shingles must be nailed a nominal 5-5/8" (143mm) from bottom of shingles, as shown, to allow for penetration through the double ply area just above the tabs. Nails should remain unexposed.



GENERAL INSTRUCTIONS

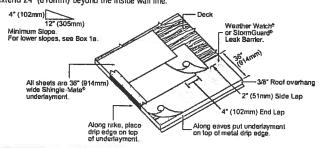
• ROOF DECKS: For use on new or reroofing work over well-seasoned, supported wood deck, tightly-constructed with maximum 6" (152mm) wide lumber, having adequate nail-holding capacity and smooth surface. Plywood decking as recommended by The Engineered Wood Assn. is acceptable. Plywood decks for Class A installations must be 3/8" (10mm) thick or greater with underlayments as noted below. Shingles must not be fastened directly to insulation or insulated deck unless authorized in writing by GAF Materials Corporation. Roof decks and existing surfacing material must be dry prior to application of shingles.

• UNDERLAYMENT: Underlayment beneath shingles has many benefits, including preventing wind driven rain from reaching the interior of the building and preventing sap in some wood decking from reacting with asphalt shingles. Underlayment is also required by many code bodies. Consult your local building department for its requirements. Where an underlayment is to be installed, a breather-type underlayment to its requirements. Where an underlayment is recommended. Underlayment must be installed flat, without wrinkles.

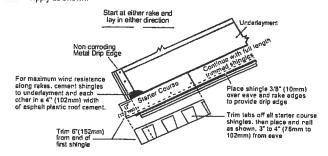
• FASTENERS: Use of nails is recommended. (Staple specifications and application instructions are available from GAF Materials Corporation, Contractor Services Dept., 1361 Alps Road, Wayne, NJ 07470.) Use only zinc coated steel or aluminum, 10-12 gauge, barbed, deformed or smooth shank roofing nails with heads 3/8" (10mm) to 7/16" (12mm) in diameter. Fasteners should be long enough to penetrate at least 3/4" (19mm) into wood decks or just through the plywood decks. Fasteners must be driven flush with the surface of the shingle. Over driving will damage the shingle, a Raised fasteners will interfere with the sealing of the shingle. Fasteners must be installed approximately 1"- 1 1/2" (25-38mm) and 11-1/2"-12-1/2" (292-318mm) from each side.

• WIND RESISTANT: These shingles have a special thermal sealant that firmly bonds the shingle together after application when exposed to sun and warm temperatures.

Underlayment: Standard Slope—4/12 (333mm/m) or more Application of underlayment: Cover deck with one layer of underlayment installed without wrinkles. Use only enough nails to hold underlayment in place until covered by shingles. Application of eave flashing: Install eave flashing such as GAF Materials Corporation Weather Watch" or StormGuard* Leak Barrier in localities where leaks may be caused by water backing up behind ice or debris dams. Eave flashing must overhang the roof edge by 3/8* (10mm) and extend 24* (610mm) beyond the inside wall line.



Starter Course Apply as shown



before sealing or are not exposed to adequate surface temperatures, or if the self-sealant gets dirty, the shingles may never seal. Failure to seal under these circumstances results from the nature of self-sealing shingles and is not a manufacturing defect. To insure immediate sealing, apply 4 quarter-sized dabs of shingle tab adhesive on the back of the shingle 1* (25mm) and 13* (330mm) in from each side and 1* (25mm) up from bottom of the shingle. The shingle must be reseased firmly into the adhesive.

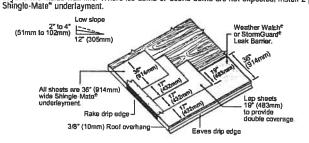
(330min) in from each size and in (230min) up from bottom of the shingle. For maximum wind resistance along takes, cement shingles to underlayment and each other in a 4" (102mm) width of asphalt plastic roof cement.

a 4* (102mm) width of asphalt plastic roof cement.
 NOTE: The film strips on the back of each shingle are to prevent sticking together of the shingles while in the bundle. Their removal is NOT required during application.
 CANADIAN COLD WEATHER APPLICATIONS: CSA 123.5-M90 mandates that shingles applied between September 1 and April 30 shall be adhered with a compatible field-applied adhesive. See Wind Resistant for GAF Materials Corporation's recommendations for the application of that adhesive.
 MANSARD AND STEEP SLOPE APPLICATIONS: For roof slopes greater than 21* (1750mm/m) per foot (do NOT use on vertical side walls), shingle sealing must be enhanced by hand sealing. After fastening the shingle in place, apply 4 quarter-sized dabs of shingle tab adhesive as indicated in Wind Resistant above. The shingle must be pressed firmly into the adhesive.
 EXPOSURE: 5* (127mm)
 THROUGH VENTIL ATION: All roof structures must be provided with through ventilation to

EXPOSURE: 5' (127mm)
 THROUGH VENTILATION: All roof structures must be provided with through ventilation to prevent entrapment of moisture laden air behind roof sheathing. Ventilation provisions must at least meet or exceed current F.H.A., H.U.D. or local code minimum requirements.
 NON-CORRODING METAL DRIP EDGES: Recommended along rake and eave edges on all decks, especially plywood decks.
 ASPHALT PLASTIC CEMENT: For use as shingle tab adhesive. Must conform to ASIM DARGE TURE Lor!

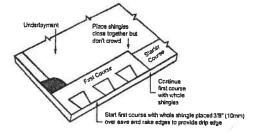
D4586 Type I or II.

Underlayment: Low Slope 2/12-4/12 (167mm-333mm/m)
Application of underlayment and eave flashing: Completely cover the deck with two
layers of underlayment as shown. Use only enough nalls to hold underlayment in place
until covered by shingles. Use blind nailing for eave flashings. At eaves and where ice dams can
be expected, use one layer of GAF Materials Corporation Weather Watch* or StormGuard* Leak
Barrier. Eave flashing must overhang the roof edge by 3/8* (10mm) and extend 24* (610mm)
beyond the inside wall line. Where ice dams or debris dams are not expected, install 2 plies of



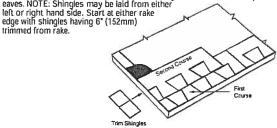
First Course

Start and continue with full shingles laid flush with the starter course. Shingles may be laid from left to right or right to left. DO NOT lay shingles straight up the roof since this procedure can cause an incorrect color blend on the roof and may damage the shingles.



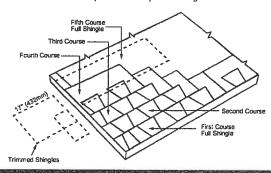
Second Course

Start and continue second course as shown. Trim 6" (152mm) from the end of the shirgle. Position the shingles in the second and subsequent courses flush with the tops of the wide cutouts. This results in a 5" (127mm) exposure. Continue with full width shingles across the roof. Strike a chalk line about every 6 courses to check parallel alignment with eaves. NOTE: Shingles may be laid from either left or right hand side. Start at either rake edge with shingles having 6" (152mm) trimmed from rake.

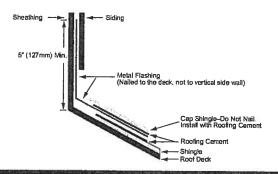


Fourth Course and Remaining Courses

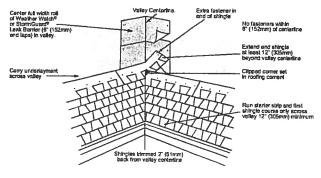
Trim 17* (432 mm) from first shingle in the course, then continue with full shingles across the roof. Fifth and subsequent courses repeat full shingle instructions from Step 3.



Wall Flashing (Sloped Roof to Vertical Wall)



Valley Construction-Closed Cut



Precautionary NotesTimberline* Series shingles are fiberglass, self-sealing asphalt shingles. Because of the natural characteristics of the high quality waterproofing material used, these shingles will be stiff in cold weather and flexible in hot weather.

- weather and flexible in flow weather.

 1. Bundles should not be dropped on edge nor should attempt be made to separate shingles by "breaking" over ridge or other bundles.

 2. Handle carefully. Shingles can easily be broken in cold weather or their edges damaged in hot

weather.

3. All exposed materials must be of Class A type.

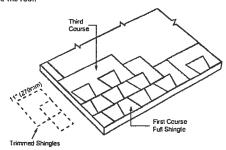
4. Storage should be in a covered, ventilated area—maximum temperature 110°F (43°C.) Store on flat surface and use weight equalization boards if pallets are to be double stacked. Shingles must be protected from weather when stored at job site. Do not store near steam pipes, radiators, etc., or in sunlight. All rolled product must be stored on ends.

5. If shingles are to be applied during PROLONGED COLD periods or in areas where airborne dust or sand can be expected before sealing occurs, the shingles MUST be hand sealed.

See Wind Resistant instructions.

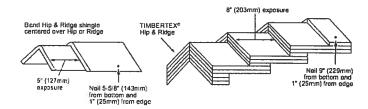
Third Course

Trim 11" (279mm) from the first shingle in the course then continue with full shingles across the roof.

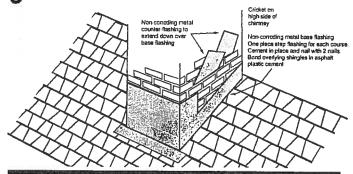


Hip and Ridge

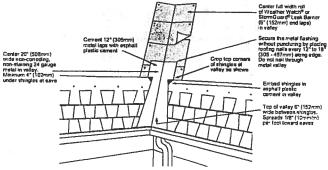
For single layer application, use hip and ridge shingles and apply as shown. To enhance appearance, use GAF TIMBERTEX" or a double layer application of Universal Hip & Ridge. (One bundle of TIMBERTEX" Hip & Ridge covers 20 lineal ft.—6.1 meters.) For double application, start with triple thickness of precut Hip & Ridge shingles and continue remainder with double thickness. Fasten in same manner as single application shown. Apply laps away from prevailing wind directions. wind direction.



Chimney Flashing



Valley Construction-Open



Re-Roofing
If old asphalt shingles are to remain in place, nail down or cut away all loose, curled or lifted shingles; replace with new; and just before applying the new roofing, sweep the surface clean of all loose debris. Since any irregularities may show through the new shingles, be sure the underlying shingles provide a smooth surface. Fasteners must be of sufficient length to penetrate the wood deck at least 3/4* (19mm) or just through plywood. Follow other above instructions for application.

Note: Shingles can be applied over wood shingles when precautions have been taken to provide an acceptable smooth surface. This includes cutting back old shingles at eaves and rakes and installing new wood edging strips as needed. Make surface smooth and use beveled wood strips if necessary. Install #30 underlayment to maintain Class A rating.

This product is sold with an express LIMITED WARRANTY only. A copy of the LIMITED WARRANTY stating its terms and restrictions is printed on the product wrapper or may be obtained from the distributor of this product or directly from GAF Materials Corporation. Any deviation from printed instructions shall be the responsibility of applicator and/or specifier.

₱2002 GAF Materials Corporation

ERTIFIED ESTING ABORATORIES

Architectural Division • 7252 Narcoossee Rd. • Orlando, Pl. 32822

(407) 384-7744 • Fax (407) 384-7751

Web Site: www.ttlarch.com

E-mail: ctlarch.com

Report Number: Report Date: CTLA-991W-1-AWT
February 18, 2003

STRUCTURAL PERFORMANCE TEST REPORT

Client:

ACTION WINDOOR TECHNOLOGY INC.

1312 W. CROSBY ROAD CARROLLTON, TX 75006

Product Type and Series: AWT Series 3950 Vinyl Fin Frame Single Hung Window with

Reinforced Sash Top Rail, Stiles & Meeting Rail H-R40 (36"x 72")

Test Specifications: AAMA/NWWDA 101/I.S.2-97 "Voluntary Specifications for Aluminum, Vinyl (PVC)"

and Wood Windows and Glass Doors"

Frame: Vinyl Fin frame measured 35.50" wide x 71.50" high overall. Mitered corner weld

construction. Fixed meeting rail secured to each frame jamb with one (1) #8 x 2" PH., PH.

SCIEW.

Ventilator: Operable sash measured 33.375" wide x 35.25" high overall. Milered corner weld

construction. Clear lite measured 31.5625" high x 33.5625" high. Fixed lite measured

32.50" wide x 33.4375"high.

Weather Stripping: One (1) strip of woolpile .220" high with integral plastic fin frame sill. One (1) strip of

woolpile .250" high with integral plastic fin sash top rail exterior. One (1) strip of woolpile .250" high each sash stile exterior leg. One (1) strip of woolpile .250" high with

integral plastic fin each sash stile interior leg. One (1) strip of foam filled bulb

weatherstrip sash bottom rail.

Hardware & Location: Two (2) metallic sweep locks located on sash top rail approx 8" from each end of

rail. Two (2) metallic keepers located on fixed meeting rail. One (1) tilt latch at each end of sash top rail. One (1) block and tackle at each frame jamb. One (1) pivot bar at each end

of sash bottom rail.

Glazing: 5/8" insulated annealed glass consisting of .125" glass .375" air space with swiggle .125"

glass. Sash exterior glazed. Fixed life interior glazed adhesive foam strip backbedding and

vinyl snap in glazing bead.

Sealant: 'A silicone type scalant was used on sill and to seal specimen to test buck.

Weep System: Weep notch measuring 2.25" x leg height located each end of sill weeping to the exterior

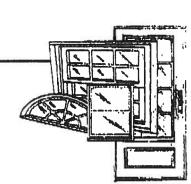
Muntins: N/

. .

Reinforcement: Fixed meeting rail has one (1) piece of extruded aluminum reinforcement measuring .662"

wide x .755" high x .099" thick x full length. Top rail, and sash stiles has one (1) piece of extruded aluminum reinforcement measuring .590" wide x .995" high x .115" thick x full

length.



Page 2 of 3 Report #:

Action Windoor Technology Inc.

CTLA-991W-1-AWT

Additional Description:

N/A

Screen:

Roll formed aluminum frame, fiberglass mesh with vinyl spline. Two (2) metallic retainer clips

and two (2) motallic plungers. Corners secured with plastic corner keys

Installation:

Twenty-six (26) 1.75" roofing nails were used to secure the specimen to the wood test buck. Five (5) were located in head and sill measuring 4", 13", 21", 29", and 33" from left jamb. Eight (8) were located in each jamb measuring 4.50", 14.25", 24", 32.75", 42", 57.25", 60.50" and 70" from sill.

Surface Finish:

White Vinyl

Comment:

Nominal 2 mil polyethylene film was used to seal against air leakage during structural loads. The

film was used in a manner that did not influence the test results

Performance Test Results

Paragraph No 2.1.2	Title of Test Air Infiltration @1.57 psf	Method ASTM E283-91	Measured .18 cfm/ft²	Allowed .34 cfm/ft²	
	The tested specimen meets or exceeds the performance levels specified in AAMA/NWWDA 101/I.S.2-97. Results recorded in two (2) decimals at the clients request. Unit tested with shirms installed under cam locks.				
2.1.3	Water Resistance @ 5.0 gph/ft²	ASTM E547-93 Four (4) five (5) minute cycles	No Entry	No Entry	
	WTP=6:75 psf Unit tested with insect st	ASTM E331-93 Fifteen (15) minute duration ereen.	No Entry	No Entry	
2.1.3	Water Resistance @ 5.0 gph/ft²	ASTM E547-93 Four (4) five (5) minute cycles	No Entry	No Entry	
	WTP= 6 psf	ASTM E331-93 Fifteen (15) minute duration	No Entry	No Entry	
	Unit tested without insec	ct screen.			
2.1.4.2	Umform Load Structura Permanent Deformation @ 60 psf positive @ 60 psf negative		.015" .005"	. 134" .134"	
2.1.8	Forced Entry Resistance Test A Test B Test C	AAMA 1302.5-76	0" 0" 0"	%" %" 1%"	
	Tost D, E and F Test G	78 •	0" 0"	1/2" 1/2"	

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Action Windoor Technology Inc.

Report #: CTLA-991W-1-AWT

Performance Test Results (continued)

Paragraph No		Method	Measured	Allowed
2.2.2.5.1	Operating Force	AAMA/NWWDA 101/I.S.2-97	18 lbs.	30 lbs.
2.2.2.5.2	Deglazing Top Rail 70 li Bottom Rail 70 li Left Side 50 li Right Side 50 li	\$. \$.	.039" = 7.8%* .038" = 7.6%* .050" = 10%< .035" = 7.0%*	<100% :100%
2.1.7	Welded Comer Test	AAMA/NWWDA 101/ IS2-97	Passe	d

Test Date

November 21, 2002

Test Completion Date:

November 21, 2002

Remarks:

Detailed drawings were available for laboratory records and comparison to the test specimen at the time of this report. A copy of this report along with representative sections of the test specimen will be retained by CTL for a period of four (4) years. The results obtained apply only to the specimen tested.

This test report does not constitute certification of this product, but only that the above test results were obtained using the designated test methods and they indicate compliance with the performance requirements (paragraphs as listed) of the above referenced specifications.

Certified Testing Laboratories assumes that all information provided by the client is accurate and that the physical and chemical properties of the components are as stated by the manufacturer.

Cortified Testing Laboratories, Inc.

James W. Blakely

Vice President

Architectural Division

cc: Action Windoor Technology Inc. (3)
File (1)

Test Start Date: 04/10/03 Test Finish Date: 03/16/04

Report Date: 03/18/04 Expiration Date: 03/18/08

Fenestration Structural Test Report Rendered To-

Vinyl Building Products, Inc. One Raritan Road Oakland, NJ 07436

Series/Model

2900 Horizontal Slider (OX)

<u>Description</u>: The product tested was a vinyl Horizontal Sliding window. The test specimen was glazed with 5/8-inch thick insulating glass units constructed with double strength annualed glass. The frame size was 69 inches wide by 48 inches high by 2-3/4 inches deep. See Appendix A.

Test Specification: ANSI/AAMA/NWWDA 101/LS.2

Summary of Results

Overall Design Pressure	35.0 psf
Air Leakage Rate	0.18 scfm/ft ²
Maximum Water Prossure Achieved	5.25 psf
Maximum Structural Pressure Achieved	60.0 psf
Forced Entry Resistance - (ASTM)	Grade 10

Specifications: The test specimen was evaluated in accordance with ANSI/AAMA/NWWDA 101/I.S.2 "Voluntary Specification for Aluminum, Vinyl and Wood Windows and Glass Doors". Sections 1, 2 and 4 only. All performance specifications in this standard shall be met for full compliance to the standard and for product certification, labeling or represented as conforming to this standard.

Referenced Test Reports: NONE

Note - The test data in any section below with an "KTR' comment have not been obtained from this specimen but from the Referenced Test Report with a specimen of the same or larger size and identical construction.

<u>Design Pressure (DP)</u>: The product tested herein has been first evaluated to the Gateway pressure in the referenced specification for the performance class rating achieved.

Gateway Performance Tests

Specification Paragraph	Title of Test	Results	Allowed
2.1.2	Air Infiltration — ASTM E283 Test Pressure - 1.57 psf The tested specimen exceeds the performance levels specified in ANSI/AAMA/NWWDA 101/LS.2 for air infilt	0.18 sofm/ft ² tration.	0.30 scfm/ft ³
2.1.3	Water Resistance ASTM E347 S gal/hr-ft² - 4 Test cycles - 24 Minutes Design Pressure - 15.0 psf Test Pressure - 2.86 psf With and Without Screen	Pass	No Leakage
2,1.4,2	Uniform Structural Load - ASTM E330 Design Pressure - 15.0 psf Test Pressure Positive Load - 22.5 psf (150% x DP) Negative Load - 22.5 psf (150% x DP) Note: Measurement taken after load from center of the meeting stile	0.033 in. 0.020 in.	0.177 in. 0.177 in
2.1.7	Corner Weld Frame - 4 Corners Sashes - 4 Corners	Pass Pass	< 100% < 100%
2.1.8	Forced Entry Resistance - ASTM F588 Lock/Tool Manipulation Tests A1 through A7 Lock/Tool Manipulation	Pass Pass Pass	No Entry No Entry No Entry
2.2.1.6.1	Operating Force - No Standardized Method Right Sash - Open/Ciosc	18/18 lbf	20 lbf
2.2.1.6.2	Deglazing - ASTM E987		
	Right Sash: Left Stile - 70 lbf Right Stile - 70 lbf Top Rail - 50 lbf Bottom Rail - 50 lbf	0.0% 0.0% 0.0% 0.0%	<100% <100% <100% <100%

Optional Performance Tests

The manufacturer specified herein has <u>successfully</u> achieved all the required criteria in Section 2 of the referenced specification for the Gateway size of the achieved Performance Rating and has further <u>successfully</u> tested the product to higher performance levels as indicated below.

Design Pressure (DP): The product tested herein has been additionally evaluated to the Design Pressure referenced below.

Specification Paragraph	Title of Test	Results	Allowed
4.3	Water Resistance - ASTM E547 5 gal/hr-ft² - 4 Test cycles - 24 Minutes Design Pressure - 35.0 psf Test Pressure - 5.25 psf (15% x DF) With and Without Screen	Pass	No Leakage
4.4	Uniform Structural Load - ASTM E330 -Design Pressure - 40.0 psf Test Pressure Positive Load - 60.0 psf (150% x DP) Negative Load - 60.0 psf (150% x DP) Note: Measurement taken after load from center of meeting stile	0.069 in. 0.066 in.	0.177 in. 0.177 in.

Conditions, Terms, and General Notes Regarding These Tests

The product tested Has Been compared to the detailed grawings, bill of materials and fabrication information supplied by the client so named herein. Our analysis, which includes dimensional and component description comparisons, indicate the tested product and engineering information supplied by the client "Are Equivalent". See Appendix A. The report and representative samples will be retained for four years from the date of initial test.

These test results were obtained by employing all requirements of the designated test methods with no deviations. The test results and specimen supplied for testing are in compliance with the referenced specifications.

The test results are specific to the product tested by this laboratory and of the sample supplied by the client named herein, and they relate to no other product either manufactured by the client, a Fabricator of the client or of installed field performance.

This report does not constitute an AAMA or NWWDA cortified product under the certification programs of these organizations. The program administrator of these programs and organizations may only grant product certification.

ETC Laboratories makes no opinions or endorsements regarding this product and its performance. This report may not be reproduced or quoted in partial form without the expressed written approval of ETC Laboratories.

No conclusions of any kind regarding the adequacy of the glass in the test specimen may be drawn from the test. Procedure "A" in ASTM E330 was used for this test.

ETC Laboratories letters, reports, its name or insignia or mark are for the exclusive use of the client so named herein and any other use is strictly prohibited. The report, letters and the name of ETC Laboratories, its seal or mark shall not be used in any circumstance to the general public or in any advertising.

Limitation of Liability: Due diligence was used in rendering this professional opinion. By acceptance of this report, this client agrees to hold harmless and indemnify ETC Laboratories, its employees and offices and owners against all claims and demands of any kind whatsoever, which arise out of or in any manner connected with the performance of work referred to herein.

FOR ETC LAB@RATORIES

Mark Sennett

AWS Supervisor

Arthur Murray, VP

Manager, Wind Engineering Laboratory



RIGHT-J LOAD AND EQUIPMENT SUMMARY Entire House

Touchstone Heating and Air, Inc.

Job: Durkin Residence 03/13/06

P.O. Box 327, Lake Builer, FL 32C54 Phone: \$85-496-3467, Fax: 386-495-3147

Project Information

For:

Stanley Crawford Construction 853 S.W. Sisters Welcome Road, Lake City, FL 32025 Phone: 388-752-5152 Fax: 386-755-2165

Notes

Design Information

		Official		
	Weather: Gainesvill	e, FL , US		
Winter Design Conditions		Summer Design Conditions		
Outside db Inside db Design TD	33 °F 70 °F 37 °F	Outside db Inside db Design TD Daily range Relative humldity Moisture difference	92 °F 75 °F 17 °F M 50 % 52 gr/lb	
Heating	Summary	Sensible Cooling Equipme	ent Load Sizing	
Building heat loss Ventilation air Ventilation air loss Design heat load	41989 Btuh 2 cfm 101 Btuh 42070 Btuh	Structure Ventilation Design temperature swing Use rnfg. data Rate/swing multiplier	23132 Btuh 935 Stuh 3.0 °F 0.97	
Infilt	ration	Use ring, data Rate/swing multiplier Total sens, equip, load	23345 Blub	
Method Construction quality Firaplaces	Simplified Average 0	Latent Cooling Equipme Internal gains Ventilation	nt Load Sizing 230 Bluh 1753 Bluh	
Area (ft²) Volume (ft²)	Heating Gooling 1841 1941 18499 16489	Infiltration Total latent equip, load	2892 Bluh 4875 Bluh	
Air changes/hour Equiv. AVF (cfm)	0.10 0.30 27 62	Total equipment load Req. total capacity at 0.70% SHR	28220 Btuh 2.8 ton	
Heating Equipment Summary		Cooling Equipment Summary		
Make Trans Trade D. XL 1200 W TWX036D	eathertron	Make Trane Trace D. XL 1200 Weathertron TWX036D		
Efficiency Heating Input Heating output Heating temp rise Actual heating fan Heating air flow factor	9.1 HSPF 34600 Btuh @ 47°F 26 °F 1200 cfm 0 029 cfm/Btuh	TWE037E13 Efficiency Sensible cooling Latent cooling Total cooling Actual cooling fan Cooling air flow factor	13.0 SEER 25200 Btuh 10800 Btuh 36000 Btuh 1200 cfm 0.052 cfm/Btuh	
Space thermostat		Load sensible heat ratio	83 %	

Bold/italic values have been manually everyidden Printout certified by ACCA to meet all requirements of Manual J 7th Ed.

Notice of Treatment					
Applicator: Florida Pest Control & Chemical Co. (www.flapest.com)					
	Address: Boun Av. City Phone Phone				
Site Location: Subdivision					
Product used	Product used Active Ingredient % Concentration				
☐ <u>Premise</u>	Imidacl	oprid	0.1%		
☐ <u>Termidor</u>	Fipro	nil	0.12%		
Bora-Care I	Disodium Octabo	rate Tetrahydr	ate 23.0%		
Type treatment:	□ Soil	☐ Wood			
Area Treated	Square feet	Linear feet	Gallons Applied		
1 Succe House	-/s:4/1	71.6	- 9 2		
As per Florida Building Code 104.2.6 – If soil chemical barrier method for termite prevention is used, final exterior treatment shall be completed prior to final building approval.					
If this notice is for the final exterior treatment, initial this line					
Date	Time	Deint To	chnician's Name		
Remarks:					
Applicator - White Permit File - Canary Permit Holder - Pink					



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COLUMBIA COUNTY, FLORIDA

epartment of Building and Zoning Inspection

This Certificate of Occupancy is issued to the below named permit holder for the building and premises at the below named location, and certifies that the work has been completed in

Building permit No. 000024304 accordance with the Columbia County Building Code.

Parcel Number 16-4S-16-03025-106

Use Classification SFD,UTILITY

Permit Holder STANLEY CRAWFORD

Owner of Building THOMAS & LINDA DURKIN

18.17

Total:

Waste: 12.25

5.92

Fire:

Location: 243 SW FANTASY GLEN(MEADOW VISTA, LOT 6)

Date: 09/07/2006

Building Inspector

POST IN A CONSPICUOUS PLACE Business Places Only