



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

Polyfoam Products, Inc.
2400 Spring-Stuebner Road
Spring, TX 77383-1132

Your application for Notice of Acceptance (NOA) of:

Two Component Polyurethane Foam Adhesive

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.: 01-0521.02
EXPIRES: 05/10/2006

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: 06/14/2001



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ROOFING ASSEMBLY APPROVAL

Category: Roofing
Sub-Category: Roof Tile Adhesive

Approval Date: **June 14, 2001**

Materials: Polyurethane

Expiration Date: **May 10, 2006**

1. SCOPE

This approves **Polypro® AH160** as manufactured by **Polyfoam Products, Inc.** as described in Section 2 of this Notice of Acceptance. For the locations where the design pressure requirements, as determined by applicable building code, does not exceed the design pressure values obtained by calculations in compliance with Roofing Application Standard RAS 127, for use with approved flat, low, and high profile roof tiles system using Polypro® AH 160. Where the attachment calculations are done as a moment based system for single patty placement, and as an uplift based system for double patty systems

2. PRODUCT DESCRIPTION

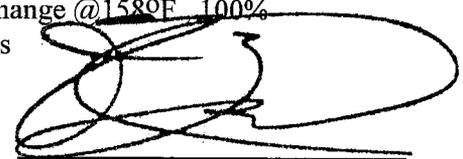
<u>Manufactured by Applicant</u>	<u>Dimensions</u>	<u>Test Specifications</u>	<u>Product Description</u>
Polypro® AH160	N/A	PA 101	Two component polyurethane
Foampro® RTF1000	N/A		Dispensing Equipment
ProPack® 30 & 100	N/A		Dispensing Equipment

2.1 Components or products manufactured by others:

Any Miami-Dade County Product Control Accepted Roof Tile Assembly having a current NOA which list uplift resistance values with the use of Polypro AH160 roof tile adhesive.

2.2 Typical Physical Properties:

<u>Property</u>	<u>Test</u>	<u>Results</u>
Density	ASTM D 1622	1.6 lbs./ft. ³
Compressive Strength	ASTM D 1621	18 PSI Parallel to rise 12 PSI Perpendicular to rise
Tensile Strength	ASTM D 1623	28 PSI Parallel to rise
Water Absorption	ASTM D 2127	0.08 Lbs./Ft ²
Moisture Vapor Transmission	ASTM E 96	3.1 Perm / Inch
Dimensional Stability	ASTM D 2126	+0.07% Volume Change @ -40° F., 2 weeks +6.0% Volume Change @ 158°F., 100% Humidity, 2 weeks



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Note: The physical properties listed above are presented as typical average values as determined by accepted ASTM test methods and are subject to normal manufacturing variation.

3. LIMITATIONS

- 3.1 Fire classification is not part of this acceptance. Refer to the Prepared Roof Tile Assembly for fire rating.
- 3.2 Polypro® AH160 shall solely be used with flat, low, & high tile profiles.
- 3.3 Minimum underlayments shall be in compliance with the Roofing Application Standard RAS 120.
- 3.4 Roof Tile manufactures acquiring acceptance for the use of Polypro® AH160 roof tile adhesive with their tile assemblies shall test in accordance with PA 101.
- 3.5 Roof Tile manufactures acquiring acceptance for two paddy placement with the use of Polypro® AH160 roof tile adhesive with their tile assemblies shall test in accordance with PA 101 and with section 10.4 as modified herein.

$$F' = \frac{\left(\frac{F}{2}\right) - W}{MS}$$

4. INSTALLATION

- 4.1 Polypro® AH160 may be used with any roof tile assembly having a current NOA that lists uplift resistance values with the use of Polypro® AH160.
- 4.2 Polypro® AH160 shall be applied in compliance with the Component Application section and the corresponding Placement Details noted herein. The roof tile assembly's adhesive attachment with the use of Polypro® AH160 shall provide sufficient attachment resistance, expressed as an uplift based system, to meet or exceed the uplift resistance determined in compliance with Miami-Dade County Roofing Application Standards RAS 127. The adhesive attachment data is noted in the roof tile assembly NOA
- 4.3 Polypro® AH160 roof tile adhesive and its components shall be installed in accordance with Roofing Application Standard RAS 120, and Polyfoam Products, Inc. Polypro® AH160 Operating Instruction and Maintenance Booklet.
- 4.4 Installation must be by a Factory Trained 'Qualified Applicator' approved and licensed by Polyfoam Products, Inc. Polyfoam Products Inc. shall supply a list of approved applicators to the authority having jurisdiction.
- 4.5 Calibration of the Foampro® dispensing equipment is required before application of any adhesive. The mix ratio between the "A" component and the "B" component shall be maintained between 1.0-1.15 (A) : 1.0 (B). The dispense timer shall be set to deliver 0.0175 to 0.15 pounds per tile as determined at calibration. No other settings shall be approved.
- 4.6 Polypro® AH160 shall be applied with Foampro RTF1000 or ProPack® 30 & 100 dispensing equipment only.
- 4.7 Polypro® AH160 shall not be exposed permanently to sunlight



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- 4.8 Tiles must be adhered in freshly applied adhesive. Tile must be set within 2 to 3 minutes after Polypro® AH160 has been dispensed.
- 4.9 Polypro® AH160 placement and minimum patty weight shall be in accordance with the 'Placement Details' herein. Each generic tile profile requires the specific placement noted herein.

Table 1: Adhesive Placement For Each Generic Tile Profile

TileProfile	Placement Detail	Single Paddy Weight Min. (grams)	Two Paddy Weight per paddy Min. (grams)
Flat, Low, High Profiles	#1	35	N/A
High Profile (2 Piece Barrel)	#1	17/side on cap and 34/pan	N/A
Flat, Low, High Profiles	#2	24	N/A
Flat, Low, High Profiles	#3		8

5. LABELING

All Polypro® AH160 containers shall comply with the Standard Conditions listed herein.

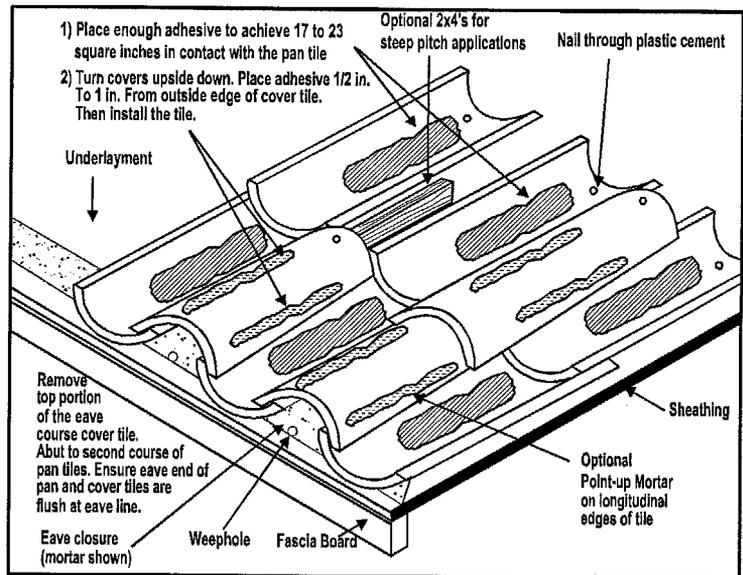
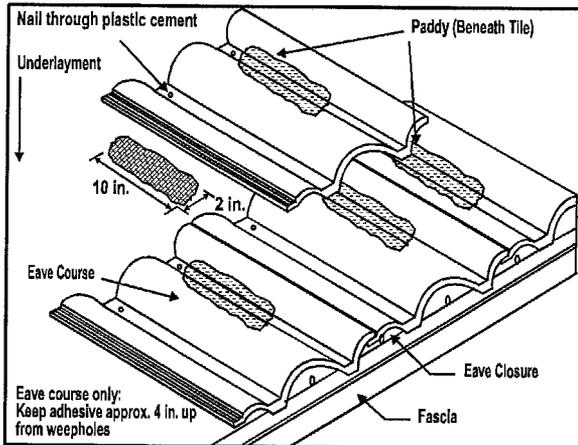
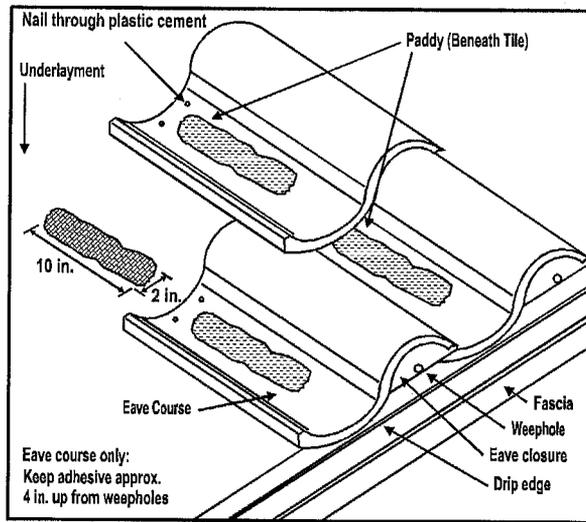
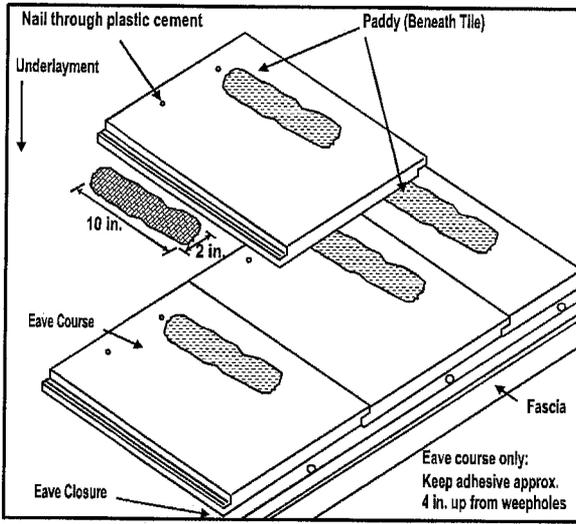
6. BUILDING PERMIT REQUIREMENTS

- 6.1 As required by the Building Official or applicable Building Code in order to properly evaluate the installation of this system.



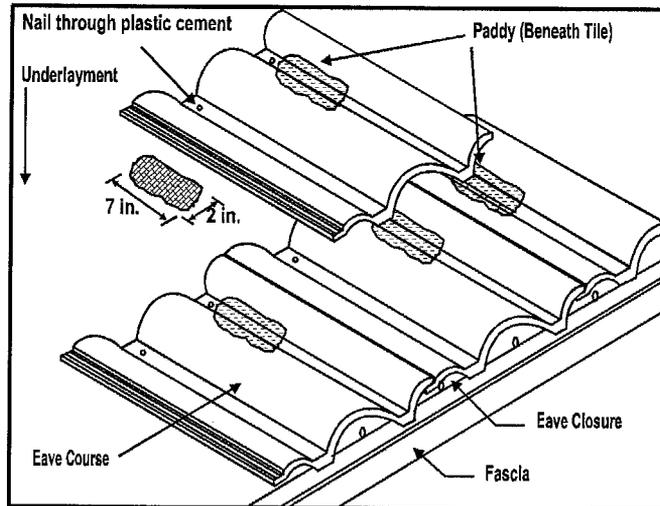
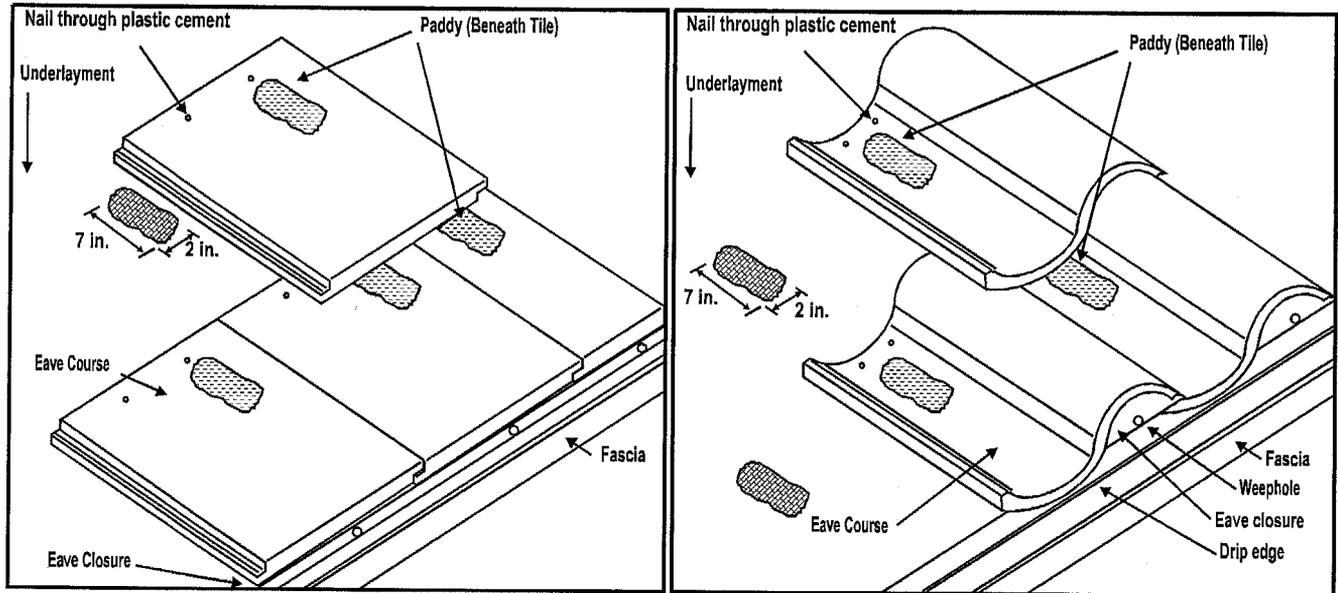
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**ADHESIVE PLACEMENT DETAIL 1
SINGLE PATTY**



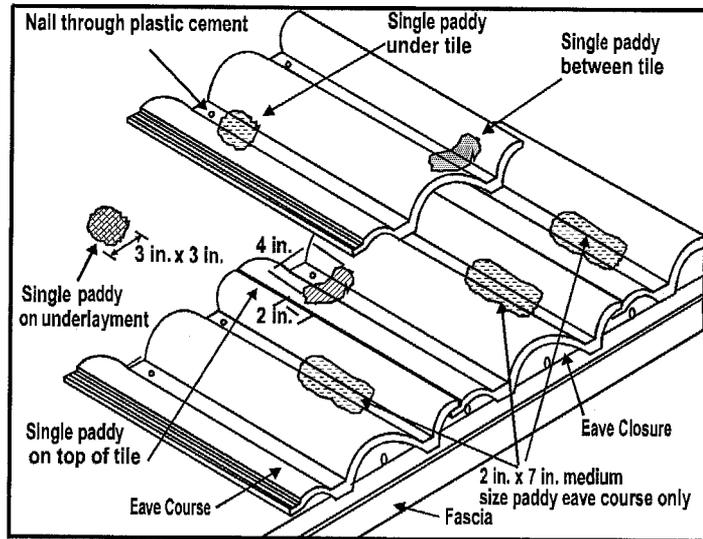
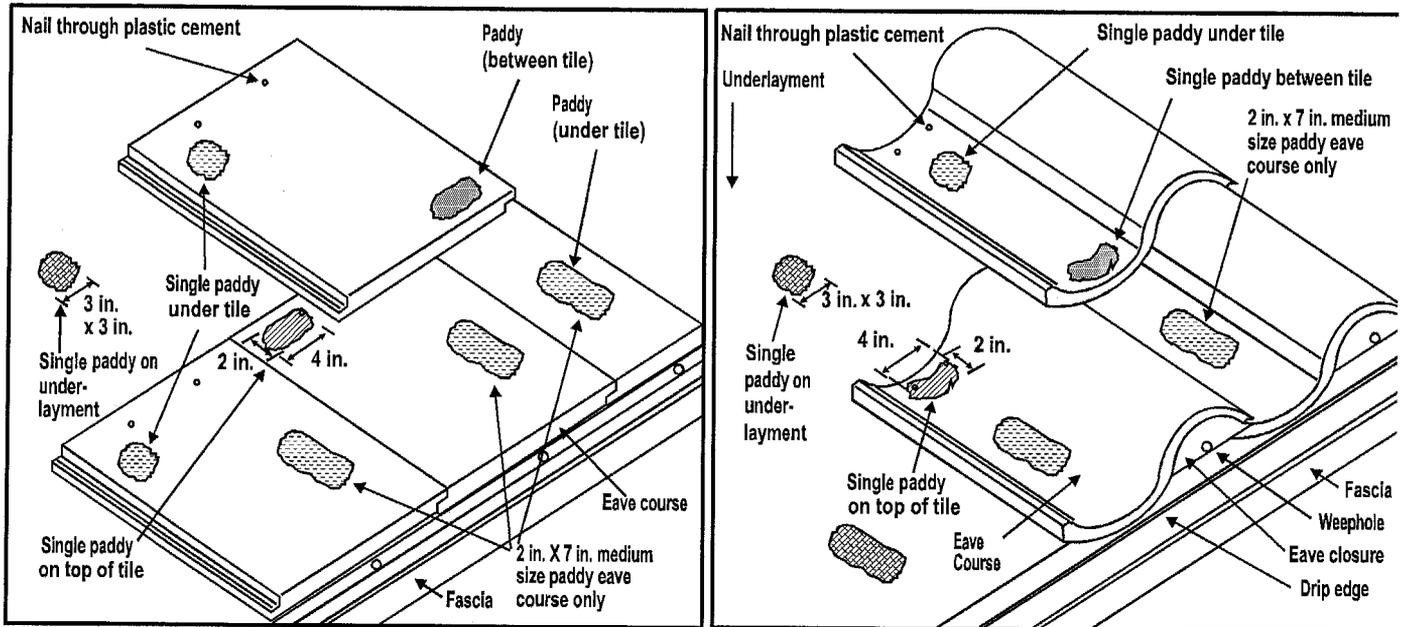
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ADHESIVE PLACEMENT DETAIL 2 SINGLE PATTY



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ADHESIVE PLACEMENT DETAIL 3 DOUBLE PATTY



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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 Approval", 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 need 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 through 8.

END OF THIS ACCEPTANCE



Frank Zuloaga, RRC
Product Control Examiner

NOTICE OF ACCEPTANCE:

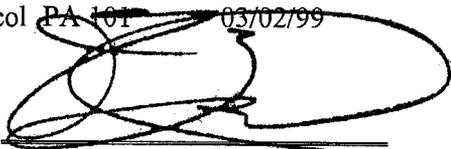
EVIDENCE SUBMITTED

(For File ONLY. Not part of NOA.)

A. DRAWINGS: NONE

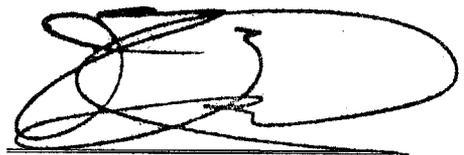
B. TESTS:

<u>Test Agency</u>	<u>Test Identifier</u>	<u>Test Name/Report</u>	<u>Date</u>
Center for Applied Engineering	#94-060	Miami Dade Protocol PA 101	04/08/94
Center for Applied Engineering	257818-1PA	Miami Dade Protocol PA 101	12/16/96
Center for Applied Engineering	25-7438-3 25-7438-4	SSTD 11-93	10/25/95
Center for Applied Engineering	25-7438-7	SSTD 11-93	11/02/95
Center for Applied Engineering	25-7492	SSTD 11-93	12/12/95
Miles Laboratories Polymers Division	NB-589-631	ASTM D 1623	02/01/94
Ramtech Laboratories, Inc.	9637-92	ASTM E 108	04/30/93
Southwest Research Institute	01-6743-011	ASTM E 108	11/16/94
Southwest Research Institute	01-6739-062b[1]	ASTM E 84	01/16/95
Trinity Engineering	7050.02.96-1	PA 114	03/14/96
Celotex Corp. Testing Services	528454-2-1 528454-9-1 528454-10-1	Miami Dade Protocol PA 101	10/23/98
Celotex Corp. Testing Services	520109-1 520109-2 520109-3 520109-6 520109-7	Miami Dade Protocol PA 101	12/28/98
Celotex Corp. Testing Services	520191-1 520109-2-1	Miami Dade Protocol PA 101	03/02/99


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NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED
(For File ONLY. Not part of NOA.)

- C. CALCULATIONS: Walker Engineering, Inc., Evaluation of Tests. Dated 04/07/99**
- D. MATERIAL CERTIFICATIONS: NONE**
- E. STATEMENTS: NONE**



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