

TOTAL WALL
EXTERIOR INSULATION AND FINISH SYSTEM
GUIDE SPECIFICATION
FOR CLASS PM

TOTAL WALL'S ONE-COAT HARD-COAT SYSTEM

PART 1: GENERAL

1.01 DESCRIPTION AND SCOPE

- A. Requirements contained within Division I (General Requirements) are applicable to the work required of this section.
Provide labor, materials, equipment and supervision necessary to complete the exterior wall and finish systems including:
1. application of TOTAL WALL mechanical fasteners and optional adhesive for attachment of insulation boards;
 2. application of a TOTAL WALL One-Coat Hard Coat Mix and TOTAL WALL reinforcing mesh over the insulation boards;
 3. application of backer rod and caulk sealant;
 4. installation of trim accessories.
- B. Related work specified elsewhere
1. Masonry, Division 4
 2. Metals, Division 5
 3. Wood Construction, Division 6
 4. Sheathing, Division 9
 5. Caulking/Sealants, Division 7
 6. Portland Cement Plastering, Division 9
- C. Referenced Documents:
1. Standards
 - a. ASTM A526 Specification for Sheet Steel, Zinc Coated (Galvanized) by Hot-Dip Process, Commercial Quality
 - b. ASTM B69 Specification for Rolled Zinc
 - c. ASTM B117 Test Method for Salt Spray (Fog) Testing
 - d. ASTM C67 Mod. Test Method For Saturated Freeze/Thaw Cycles of Exposure
 - e. ASTM C150 Specification for Portland cement.
 - f. ASTM C297 Test Method for Tensile Strength of Flat Sandwich constructions in Flatwise Plane
 - g. ASTM C578 Specification for Preformed, Cellular Polystyrene Thermal Insulation
 - h. ASTM C1135 Test Method for Determining Tensile Adhesion Properties of Structural Sealants
 - i. ASTM D968 Test Method for Abrasion Resistance of Organic Coatings by Falling Abrasive
 - j. ASTM1784 Specification for rigid PVC

- k. ASTM D2247 Practice for Testing Water Resistance of Coatings in 100% Relative Humidity
 - l. ASTM E84 Test Method for Surface Burning Characteristics of Building Materials
 - m. ASTM E108 Mod. Full Scale Structural Fire Testing of Wall Systems
 - n. ASTM E330 Test Method for Structural Performance by Uniform Static Air Pressure Difference
 - o. ASTM E331 Test Method for Water Penetration by Uniform Static Air Pressure Difference
 - p. ASTM E695 Method for Measuring Relative Resistance to Impact Loading
 - q. ASTM G23 and G53 Accelerated Weathering for Exposure of Nonmetallic Materials
 - r. Fed Mil Spec 810D Test Method for Determining the Resistance to Mold and Fungus Growth
2. Building Code Standards
- a. National Building Code, Building Officials and Code Administrators International (BOCA), Section 1406.0
 - b. Standard Building Code, Southern Building Code Congress International (SBCCI), Sections 717.4 and 717.5
 - c. Uniform Building Code, International Conference of Building Officials (ICBO), UBC Standard 26-4
 - d. International Building Code, International Code Council

D. Terms and Definitions

- 1. Class PM System
 - a. A class of EIFS where TOTAL WALL reinforcing mesh is covered with TOTAL WALL One-Coat Hard Coat Mix from 3/16" to 3/8" thickness in a chosen color and texture. The TOTAL WALL reinforcing mesh is a woven glass fiber fabric, which is coated with a protective plastic material.
- 2. Insulation Board
 - a. A preformed rigid insulating foam plastic that functions to reduce heat flow through a wall and to provide a surface for the base coat and reinforcing mesh. Typically, a 4' by 8' Extruded Polystyrene (XPS) foam board with an average density of 2 lb per cubic foot is used in thicknesses that vary from 3/4" to 4". The XPS board must meet specific performance and safety specifications.
- 3. Adhesive
 - a. An optional material that is used in addition to mechanical fasteners to help attach the foam insulation board to the substrate. Typically, the adhesive is TOTAL WALL Blue Mastic Adhesive.
- 4. One-Coat Hard Coat Mix
 - a. A material that is applied to the face of the insulation board and is used to cover the reinforcing mesh and functions as an impact barrier, weather barrier and finish coat.
- 5. Reinforcing Mesh
 - a. An open weave fiberglass fabric that is coated with a protective plastic. It is attached to the insulation board and covered by the TOTAL WALL One-Coat Hard Coat Mix to strengthen the system.
- 6. Accessories
 - a. Items such as weep bases, corner beads, casing beads and expansion joints that are utilized in the assembly of the system.
- 7. Mechanical Fastener
 - a. A combination metal and plastic washer plate that is used to attach foam plastic insulation boards to a wall.
- 8. Sealant

- a. A permanently flexible self-sticking compound that is used to seal seams in the system such as the seams occurring between the system and windows and doors.

1.02 DESIGN LIMITATIONS AND DETAILING

- A. The maximum allowable system deflection, normal to the plane of the wall, is $L/360$.
- B. Design wind load shall not exceed TOTAL WALL's allowable wind load as stated in TOTAL WALL Code Evaluation Reports.
- C. All details shall conform to TOTAL WALL recommendations and shall be consistent with the project requirements.
 1. General
 - a. All details shall conform to TOTAL WALL recommendations and shall be consistent with project requirements.
 - b. The Insulation Board shall be separated from the interior of the building by 1/2" gypsum wallboard or equivalent thermal barrier material which will limit the average temperature rise of the unexposed surface to not more than 250 degrees F after 15 minutes of fire exposure, when subjected to the ASTM E-119 time-temperature curve.
 - c. The minimum thickness of XPS shall be 3/4" and the maximum thickness shall not exceed 4".
 - d. The length and slope of inclined surfaces shall follow the guidelines listed below:
 1. Minimum slope: 6" of rise in 12" of horizontal projection.
 2. Inclined surface shall not be used for areas defined as roofs by building codes.
 3. TOTAL WALL shall approve use not meeting the above criteria in writing prior to installation.
 2. Substrate System
 - a. Shall be engineered to withstand all applicable loads, including live, dead, positive and suction wind, seismic, etc. Bond strength, fastener strength and connection strength shall be analyzed and engineered. Appropriate factors of safety shall be used.
 - b. The maximum deflection under positive or suction full design loads of the substrate system shall not exceed $L/240$.
 3. Substrates
 - a. Application of the system shall be to the following substrates only:
 1. Sound brick
 2. Sound unit masonry
 3. Sound concrete
 4. Exterior grade gypsum sheathing
 5. Dens-Glas Gypsum sheathing
 6. Sound stucco
 7. OSB board
 8. WR and MR gypsum board, when acceptable to code authorities
 9. Exterior Grade Plywood
 10. Cement Board
 - b. TOTAL WALL shall approve substrates other than those listed above in writing prior to installation.
 - c. Sheathing substrates shall be oriented with their strong axis perpendicular to the supporting framing.
 - d. The applicator shall verify that the proposed substrate is acceptable to the applicable regulatory authorities prior to installation of the system.

- e. If the adhesive option is to be used in addition to fasteners, painted substrates shall have any loose paint removed using appropriate materials and methods.
 - f. The substrate shall not have any planar irregularities of greater than 1/4" in eight lineal feet.
 - 4. Expansion Joints
 - a. Continuous expansion joints shall be installed at the following locations:
 - 1. Where expansion joints occurring the substrate.
 - 2. Where building expansion joints occur.
 - 3. At floor lines in wood-frame construction.
 - 4. Where the system abuts other materials.
 - 5. Where the substrate changes.
 - b. Control joints shall be installed:
 - 1. At changes in roofline.
 - 2. To limit any wall areas to 150 sq ft and to limit any wall area length to width ratio to 2.5:1.
 - 3. At changes in building shape and structural system.
 - c. Expansion and contraction of the system & adjacent materials shall be taken into account in the design of expansion joints, with proper consideration given to sealant properties, installation conditions, temperature range, coefficient of expansion of materials, joint width-to-depth ratios, etc.
 - d. Isolation joints are required around all wall protrusions, including doors and windows.
 - 5. Details
 - a. TOTAL WALL's latest published information shall be followed for standard detail treatments.
 - b. Non-standard detail treatments shall follow the recommendations of TOTAL WALL.
 - c. Corners shall be reinforced with Corner Mesh, or approved PVC or metal accessory.
 - d. Openings shall be reinforced using a 9 1/2" wide strip of Detail Mesh laid at a 45 degree angle to the opening corner if control joints are not used at that location.
 - e. System terminations shall have either an approved PVC or metal 1/4" casing bead.
 - f. The bottom system termination shall have an approved PVC or metal weep base or starter strip.
- D. The use of dark colors must be considered in relation to estimated wall surface temperatures as a function of local climate conditions.

1.03 QUALITY ASSURANCES

A. Contractor

- 1. The contractor shall have a minimum of two years experience in the wall construction trades, be licensed by TOTAL WALL for application of PM Systems, demonstrate the ability to install the system based on projects of similar size and complexity, and meet the approval of the architect. The contractor shall provide a list of completed projects. The contractor shall provide the equipment, manpower and supervision necessary to install the system in compliance the project plans and specifications.

B. Insulation Board Manufacturer

- 1. The Insulation Board Manufacturer shall be Dow Chemical Corporation or be recognized by TOTAL WALL as capable of producing insulation board to meet the system requirements. The insulation board manufacturer shall be listed by an approved agency, and the board and packaging shall be labeled as required by TOTAL WALL and the applicable building code.

1.04 SUBMITTALS

- A. Sample Panel: The contractor shall submit to the architect a sample panel of at least 1' x 1' demonstrating the texture and color of the One-Coat Hard Coat Mix desired. The architect shall review the panel and determine the suitability of the finish presented.
- B. The contractor shall submit a list of five projects, exhibiting the contractor's EIFS installation skills, which has been completed within the last five years. The list shall include project name, location, description of work and date.
- C. TOTAL WALL's literature, including application instructions, specifications and details.
- D. The Insulation Board Manufacturer documentation to show compliance to TOTAL WALL and Code requirements.

1.05 PRODUCT DELIVERY AND STORAGE

- A. Delivery: Deliver all materials supplied by TOTAL WALL in original, unopened containers with legible manufacturer's identification intact.
- B. Storage:
 - 1. Store all products off the ground, under cover and protected from dampness and sunlight.
 - 2. Warning: XPS rigid insulation is combustible and may constitute a fire hazard if improperly used or installed. XPS insulation should be adequately protected. Use only as directed by the specific instructions for these products. During shipping, storage, installation or use, these materials should not be exposed to open flame or any ignition sources. For proper protection of rigid insulation, consult the National Fire Protection Association (NFPA) standards or the authority having jurisdiction. Store XPS under cover, off of the ground with full support, stacked horizontally.
 - 3. All liquid products shall be stored at 40 degrees F or above and protected from freezing. Protect from exposure to direct sunlight during storage.

1.06 JOB CONDITIONS

- A. Install all materials in strict accordance with all safety and weather conditions required by the product literature, and in accordance with ASTM C926, paragraph 7, and as modified by the applicable standards of the authorities having jurisdiction.
- B. Apply the coating when the ambient temperature is 40 degrees F and rising. A minimum temperature of 40 degrees F should be maintained for twenty-four hours after completion of work. Supplementary heat must be provided if stated temperature conditions do not exist. Do not apply coatings to a frozen surface.
- C. Protect surrounding areas and surfaces during application of the wall system.
- D. Protect system from precipitation during application and for least 24 hours after application.

1.07 COORDINATION AND SCHEDULING

- A. Closely coordinate work with related sections and trades.
- B. Protect the tops of walls to prevent water from entering behind the system. Any required cap flashing, overhangs, or dip edges shall be installed as soon as possible after the finish coat has been applied.
- C. Install all sealants in a timely fashion. Protect open joints from water intrusion with backer rod or other means until the sealant has been installed.
- D. When required by code or job requirements, contract with a certified 3rd Party EIFS Inspector prior to any TOTAL WALL EIFS installation. The inspector shall be EDI (Exterior Design Institute) certified or other approved certifying agency as approved by TOTAL WALL. The inspector will make a minimum of three on-site inspections, which include phases of rigid foam attachment, base coat and mesh application, and finish and sealant application.

1.08 SYSTEM WARRANTY

- A. A TOTAL WALL Warranty shall be applied for prior to the EIFS installation.
- B. Upon completion of the EIFS installation in accordance with specifications and payment of monies due TOTAL WALL, TOTAL WALL shall issue an either a five-year material WARRANTY or a single source 10-year material and labor WARRANTY, as qualified for by the job and credentials of the applicator.

PART 2: PRODUCTS

2.01 MANUFACTURERS

- A. All materials related to EIFS shall be obtained from TOTAL WALL, P. O. Box 8098, Madison, WI 53708 [888-702-9915].
- B. A TOTAL WALL approved supplier.

2.02 EXTERIOR INSULATION SYSTEM COMPONENTS

- A. Rigid insulation board shall be 4' x 8' XPS, meeting ASTM C578 performance standards, an average density of 2 pounds per cubic foot, and with a minimum of 3/4" thickness and a maximum thickness of 4' as specified by drawings.
- B. Adhesive (optional)- - shall be TOTAL WALL Blue Mastic Adhesive.
- C. One-Coat Hard Coat Mix shall be TOTAL WALL's field mixed polymer modified Portland cement based mixture. The mix ratio shall be as follows:

1. Portland cement (white)- one 94 lb bag
 2. Sand - 150 lbs
 3. TOTAL WALL Liquid Acrylic Additive - one 5-gallon pail
 4. TOTAL WALL Matrix Additive (powder) - one bag (one pound).
- D. Reinforcing Mesh - A plastic coated fiberglass reinforcing fabric as required and supplied by TOTAL WALL: 4 ounce 3/8" open weave Hard Coat mesh.
- E. Sand - The sand shall be dry, clean, iron-free, quartz sand with a mean distribution averaging from 45 to 55 mesh by ASTM C136 and less than 0.5% organics by ASTM C40.
- F. Portland Cement - Shall be Type I, I-II, or II meeting ASTM C150, fresh and free of lumps (white Portland).
- G. Water - Shall be clear, potable and free of foreign matter.
- H. Sealant Systems:
1. Shall be one of the following:
 - a. Tremco, Inc.:
 1. Sealant: "Dymeric"
 2. Prime: Use manufacturers recommended Primer.
 3. Backer Rod: Dow "Ethafoam"
 4. Bond Breaker: 3M#226, 481, 710
 - b. Pecora Corporation:
 1. Sealant: "Dynatrol II"
 2. Prime: Use manufacturers recommended Primer.
 3. Backer Rod: Dow "Ethafoam"
 4. Bond Breakers: 3M #480 or Valley Industrial Products #90
 - c. Dow Corporation:
 1. Dow 790 series sealants
 2. Prime: Use manufacturers recommended Primer.
 3. Backer Rod: Dow "Ethafoam"
 - d. Pecora Corporation:
 1. Sealant: 890 Sealant
 2. Prime: Use manufacturers recommended Primer.
 3. Backer Rod: Dow "Ethafoam"
 2. System materials shall be dried prior to Sealant Installation.
 3. The architect shall select color.
 4. Other sealants as approved in writing by Total Wall.
- I. Accessories - - As required by TOTAL WALL and job specifications, shall be proper size and configuration for their function and shall be manufactured from rigid PVC, solid zinc alloy, or galvanized steel.
- J. Fasteners - - As required by TOTAL WALL and job specifications, shall have the necessary pull out strength, corrosion resistance, length and design as supplied by TOTAL WALL to meet the system design loads.

2.03 MIXING AND PREPARATION

- A. TOTAL WALL EIFS One-Coat Hard Coat Mix
 - 1. Obtain a clean portable mortar mixer.
 - 2. Add 5 gallons of TOTAL WALL Liquid Acrylic Additive.
 - 3. Begin low speed mixing and add one 94 lb bag of Portland cement (white).
 - 4. Add 150 lbs of sand.
 - 5. Sprinkle in the TOTAL WALL Matrix Additive.
 - 6. Add up to 1 quart of additional water to adjust the mixture to a creamy trowel-grade consistency.
 - 7. Add colorant while mixing, specified, to achieve desired color.
 - 8. Allow the mixture to stand for 2-3 minutes and mix again, on low speed for an additional minute. Again, clean water may be added to enhance workability.
 - 9. Begin using product immediately.

- B. Adhesive
 - 1. If desired to enhance workability, up to 8 ounces of water may be added to TOTAL WALL Blue Mastic Adhesive with low speed mixing.

2.04 PERFORMANCE REQUIREMENTS

The TOTAL WALL system and its components shall meet the following performance requirements:

- | | |
|---|--|
| A. ASTM E84 Surface Burning | FSI = 10, SDI = 35 |
| B. ASTM E108 mod. Full Scale Fire Test | Pass (No Flame spread) |
| C. MIL STD 810D Mildew Resistance (Method 508.3) | 28 days - no growth |
| D. ASTM E695 Full Scale Impact Loading | No Damage |
| E. ASTM D968 Sand Abrasion 500 liters | 260 L/ml, No Deleterious Effects |
| F. ASTM D2247 Water Resistance | No Deleterious Effects |
| G. ASTM B117 Salt Spray (300 hours) | No Deleterious Effects |
| H. ASTM E96 Water Vapor Transmission | 1.53 perms |
| I. ASTM C67 mod. Saturated Freeze/Thaw (50 cycles) | No Deleterious Effects |
| J. ASTM C297 Tensile Adhesion | No failure in adhesive, base or finish |
| K. ASTM E330 modified By E72-80
Negative and Positive wind Load | (Positive 102, Negative 118 psf) |
| L. ASTM E331 Wind Driven Rain
(5 gal/sq.ft./hour rain fall plus 65 mph wind) | No Penetration |

M. ASTM D2797 Impact resistance	42.5 in-Lb
N. ASTM G23 Accelerated Weathering (2000 hrs)	No Deleterious Effects
O. ASTM C209 Tensile Bond	85% failure in foam
P. ASTM C203 Flexural Strength	0.555 deflection at 73.5 load
Q. ASTM C109 Compressive Strength	4260 PSI

PART 3: EXECUTION

3.01 INSTALLATION

- A. The installation shall be performed strictly in accordance with TOTAL WALL's current literature and current job specifications.

3.02 INSPECTION

- A. Examination of Substrate
 - 1. Prior to installation of the System, the substrate shall be examined by the applicator as follows:
 - a. The substrate shall be a type approved for the system (see Section 1.02-C.3a).
 - b. The substrate surface shall be free of excessive contaminants or materials that may interfere with bond.
 - c. The substrate shall be examined for compliance with contract documents.
 - d. The substrate shall be examined for soundness, such as tightness of connections, crumbling or looseness of surface, voids and projections.
 - e. The substrate shall be examined for dimensional correctness.
 - 2. The architect and general contractor shall be advised of all discrepancies. Work shall not proceed until unsatisfactory conditions are addressed.

3.03 INSTALLATION

- A. Mixing -- All materials requiring preparation shall be labeled accordingly; the contractor shall follow all instructions.
- B. System Terminations - - At all system terminations, the system shall have approved accessories or corner mesh.
 - 1. Reinforcing mesh shall overlap the system accessory flange at least 2".
 - 2. System details may also be terminated with approved corner mesh.
- C. Installation of Rigid Insulation
 - 1. Extruded Polystyrene (XPS)
 - a. XPS shall be applied to the substrate surface starting from the bottom and shall be supported by permanent means such as a weep base or starter strip fastened to the wall.

- b. The XPS shall be applied with the edges oriented with its joints offset with respect to the sheathing joints, and with interlocking insulation boards at inside and outside corners.
 2. Optional TOTAL WALL Blue Mastic Adhesive
 - a. Ribbon and Dab method: Ribbons of TOTAL WALL EIFS Blue Mastic Adhesive shall be applied with a trowel to one surface of the XPS. The ribbons shall be 2" wide, 3/8" thick around the entire perimeter of the XPS. The adhesive shall not be applied to the ends of the XPS boards. Eight (8) dabs of adhesive 8" in diameter by 3/8" thick shall be applied to the area within the perimeter ribbon. A minimum of 33% of the XPS surface shall be in contact with the TOTAL WALL EIFS Blue Mastic Adhesive.
 - b. Notched Trowel Method: Beads of TOTAL WALL Blue Mastic Adhesive shall be applied to one surface of the Grade IV XPS using a notched trowel having an edge profile meeting TOTAL WALL requirements. The trowel shall produce beads that stand out 3/8" from the surface of the Grade I XPS. There shall be a minimum of six beads per 12" of trowel. Each bead shall be a minimum of 3/16" wide. The Adhesive shall not be applied to the ends of the XPS boards.
 3. Install approximately four mechanical fasteners per board to hold the XPS boards in place; the remaining fasteners will be installed through the reinforcing mesh. For frame construction, fasteners shall be of the type and configured to penetrate studs a minimum of 1/2". For masonry, fastener holes must be predrilled with an appropriate size masonry bit so that the fastener shall have a firm attachment to the substrate and sized for specified penetration into the substrate.
 4. If a gap in the XPS board occurs, slivers of XPS shall be cut and shaped to fit the gaps and inserted without using any adhesive or filler between XPS boards.
 5. All outer surfaces of the XPS boards shall be sanded or lightly etched. This increases bond to the XPS boards.
 6. Measure and cut run of Total Wall Hard Coat reinforcing mesh. The reinforcing mesh shall cover the entire surface of the XPS insulation boards, with the only breaks in the mesh occurring at expansion joints. Overlap runs of reinforcing mesh by a minimum of 2 1/2". Temporarily tack the mesh in place by inserting roofing nails through the mesh and into the XPS. The roofing nails will be removed after the remaining mechanical fasteners are installed.
 7. Install all system accessories including casing beads at all system stops, surface mount v-joints control joints, and corner strips or mesh. The accessory flanges shall overlap the reinforcing mesh by a minimum of 2'. Mitre the flange edges where they meet other accessories to make a level fit.
 8. Install the remainder of the mechanical fasteners to a density of one fastener per square foot. Remove the roofing nails that were holding the reinforcing mesh in place.
 9. TOTAL WALL's latest published detailed instructions, and special instructions for this project shall be followed regarding installation of the XPS.
- D. TOTAL WALL One-Coat Hard Coat Mix
1. Damaged areas and foreign materials shall be addressed prior to application of the One-Coat Hard Coat Mix.
 2. For deterioration due to weathering or any other cause, refinish the XPS surface by sanding, while maintaining the flatness of the surface.
 3. Using a steel trowel, apply the TOTAL WALL One-Coat Hard Coat Mix to the surface of the XPS and reinforcing mesh to a uniform thickness of approximately 1/4". The TOTAL WALL EIFS One-Coat Hard Coat Mix shall be applied continuously and in one operation to the entire wall surface, or to a logical break point.
 4. Apply additional TOTAL WALL One-Coat Hard Coat Mix as necessary to build out a minimum of 1/4" thickness over the surface. Immediately remove any One-Coat Hard Coat Mix from control joints or expansion joints.

5. Use a darby or slicker to level the surface of the One-Coat Hard Coat Mix.
6. Apply the approved texture using a second pass of One-Coat Hard Coat Mix. It may be necessary to wait up to 30 minutes, depending on conditions, to apply the texture.
7. A period of 18 hours shall lapse to allow the TOTAL WALL One-Coat Hard Coat Mix to cure. The coating shall be protected from damage and weather while curing.
8. Details of the installation of the base coat at the ends of walls, windows, insulation board edges, corners, etc., shall be in accordance with TOTAL WALL's latest detailed installation instructions and current job drawings.

E. Sealant and Backer rod

1. Insure that backer rod, primer (if required) and sealant is properly installed at all applicable openings and joints. These will include expansion joints and isolation joints. Consult Total Wall details, and job documents for additional information.

3.04 JOB SITE CLEANUP

- A. All excess TOTAL WALL system materials shall be removed from the job site by the applicator.
- B. All surrounding areas where TOTAL WALL EIFS has been applied shall be left free of debris and foreign substances.

3.05 INSPECTION

- A. The TOTAL WALL applicator, a representative of the property owner's team, and a TOTAL WALL representative shall inspect the EIFS Installation and prepare an inspection summary with a copy to TOTAL WALL.
- B. If an EIFS 3rd Party Inspector is used, a copy of the final report shall be submitted to TOTAL WALL.

END OF SPECIFICATION

Filename: PM One-Coat Long Form Spec
Directory: \\Jay\data\Shared Documents\Total Wall For Web\Long Forms
Template: C:\WINDOWS\Application Data\Microsoft\Templates\Normal.dot
Title: EXTERIOR INSULATION AND FINISH SYSTEM (EIFS)
Subject:
Author: Steven B. Slatcher
Keywords:
Comments:
Creation Date: 12/11/2001 1:29 PM
Change Number: 2
Last Saved On: 12/11/2001 1:29 PM
Last Saved By: Unknown User
Total Editing Time: 1 Minute
Last Printed On: 12/11/2001 1:29 PM
As of Last Complete Printing
Number of Pages: 11
Number of Words: 3,546 (approx.)
Number of Characters: 20,213 (approx.)