

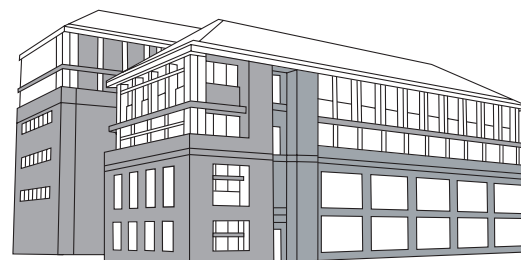
RIDGE VENTILATION



A Fiberweb Brand



A Fiberweb Brand



A Fiberweb Brand

All part of the **Typar® Weather Protection System**

Start Smart with
the Typar® Weather
Protection System.

When designing and constructing a new building, protect it from the elements and the damaging effects of moisture. Before the walls are framed and the siding is selected, Start Smart with the Typar Weather Protection System, which includes Typar® HouseWrap, MetroWrap™ and StormWrap™ — as well as flashings, construction tape and RoofWrap™. And with its air-sealing qualities, Typar continues to perform even after construction, improving occupant comfort and lowering utility bills. Get the best weather resistant barrier performance and increased energy efficiency — all backed by a 10-year limited warranty.

Smart system backed by
a 10-year limited warranty.



Typar® HouseWrap

You want to design and build homes that are comfortable, cozy, energy-efficient and will stand the test of time. As part of the complete Typar Weather Protection System, Typar HouseWrap is a key building material to incorporate into your home designs to assure long-term homeowner satisfaction.

Typar HouseWrap delivers four key advantages you won't find with other housewraps:

- **Superior water holdout** — blocks water from entering the wall cavity.
- **Optimal moisture vapor transmission (MVT)** — it breathes so moisture can escape the wall cavity.
- **Superior tear strength** — proven to withstand heavy winds and is almost five times stronger than the leading competitive wrap.
- **Exceptional surfactant resistance** — reduces the damaging effects that oils and tannins from OSB, soaps and powerwashing can have on the system's ability to block moisture.



Think of Typar HouseWrap as an extra layer of protection to secure the building envelope. With Typar on the outside, homeowners feel more comfortable inside. Typar eliminates drafts in the wall, which helps reduce energy costs. And the Typar material itself will not support the growth of mold (ASTM D3273) or disintegrate over time, for added confidence and reduced worries for you. Typar HouseWrap offers superior protection you and your clients can count on and expect in their homes.



Typar Weather Resistant Barrier products contain 25% post-individual recycled content which reduces the consumption of raw materials and our environmental footprint.



FOR RESIDENTIAL APPLICATIONS

TYPICAL CHARACTERISTICS

Basis Weight	(ASTM D-5261)	3.1 osy 21.0 lbs/1000ft ²
Thickness	(ASTM D-1777)	12.9 mils
Bursting Strength	(ASTM D-3786)	66 psi
Dry Tensile Strength	(ASTM D-5034)	80 lbs md 87 lbs xd
Trapezoidal Tear	(ASTM D-1117/ ASTM D-5733)	30 lbs md 33 lbs xd
Pliability	(AC-38)	Pass
Hydrostatic Pressure Resistance	(AATCC 127-1995)	865 cm
Gurley Hill Porosity	(TAPPI T-460)	> 2500 sec/100cc
Moisture Vapor Transmission Rate	(ASTM E-96-95, procedure A)	11.7 U.S. perms
Ultra Violet Light Exposure Resistance (UV)		6 months
"Air-Ins" (Air Leakage Test)	(CCMC Technical Guide MF-07273)	.0032L/(S·M ²) @ 75 pascals
Water Resistance Test (Boat Test)	(ASTM D-779)	PASS
Water Ponding Test	(CCMC Technical Guide MF-07193)	PASS
Surface Burning Characteristics	(ASTM-E-84-00a)	
Flame Spread Index		Class A
Smoke Developed Index		PASS

ROLL SIZES

3 ft x 100 ft	9 ft x 150 ft
4.5 ft x 200 ft	9 ft x 195 ft
9 ft x 100 ft	10 ft x 100 ft
9.5 ft x 95 ft	10 ft x 150 ft

ICC #ESR-1404, CCMC #12892-R, CCMC #12894-R

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For more information, call 800-284-2780
or visit www.typar.com.

SPECIFICATIONS:

PART 1 – GENERAL

1.1 Summary

A. Includes but not limited to:

1. Furnish and install weather resistive barriers on exterior side of exterior wall sheathing as described in Contract Documents.

1.2 References

- ASTM E- 1677-95 "Standard Specification for an Air Retarder (AR) Material or System for Low-Rise Framed Building Walls".
- ASTM E-96-90 "Standard Test Method for Water Transmission of Materials".
- AATCC-127 "Hydrostatic Head Test".
- ASTM D-5733-9 Trapezoidal Test.
- Air-Ins ASTM E-283 Canadian Air Barrier Materials Standard.
- ASTM D-779 Dry Indicator Method, Water Penetration Resistance.

1.3 Submittals

A. Quality Assurance

1. Submit copies of test results showing performance characteristics equaling or exceeding those specified.

PART 2 – PRODUCTS

2.1 Water-Resistant Barrier

- Spunbonded Polypropylene Weather Membrane with a microporous coating, Non-woven, Nonperforated.
- Performance Characteristics
 1. Gurley Hill [TAPPI T-460] [sec/100cc] >2500.
 2. Water Vapor Transmission 5 perms & 20 perms as tested by ASTM E-96-90, Method A.
 3. Water penetration resistance of 865 cm on hydrostatic head in accordance with AATCC-127.
 4. Trapezoidal Test of 30/33 in accordance with ASTM D-5733-9.
 5. Air-Ins < .02L/S·M² @ 75 PA.
 6. Dry Indicator Method ASTM D-779 = to 24 hour rating.
- Approved Manufacturers
 1. Typar® Weather-Protection Membrane by Fiberweb™
 2. Contact Information: 800-284-2780

2.2 Sealing Tape/Fasteners

- Approved Tape Manufacturers
 1. Typar® Construction Tape, by Fiberweb™
- Recommended Sealants against Typar logo side coating.
 1. Elastomeric polymer based, butyl rubber, rubber based, meeting ASTM C920 evaluation.
- Recommended Fasteners for Wood, Insulated Sheathing Board, Exterior Gypsum
 1. Plastic cap nails.
 2. Plastic cap staples.
- Recommended Fasteners for Steel Frame construction
 1. Rust-resistant screws with washers.
- Recommended Fastening to Masonry
 1. Sealant: Polyurethane based, meeting ASTM C920 evaluation.
 2. Mechanical: Masonry fastener with washer.

PART 3 – EXECUTION

3.1 Installation

- Install in accordance with Manufacturer's instruction over exterior sheathing or open studs. Seal joints and penetrations through weather resistive barrier with specified tape and fasteners prior to installation of finish material. Air infiltration barrier shall be air tight and free from holes, tears, and punctures. All window and door penetrations are to be flashed and sealed per ASTM 2112, AMMA guidelines and manufacturer instructions. Cover with exterior cladding within 6 months of installation.



Typar® HouseWrap helps reduce air leaks in a house thereby reducing the energy consumption.

Typar® MetroWrap™

For commercial applications, it just makes sense to specify a commercial-grade wrap. Typar MetroWrap stands up to the rigors of commercial construction with superior performance and toughness.

Typar MetroWrap offers all the great benefits realized with Typar® HouseWrap, plus provides special advantages ideal for multi-family dwellings, light commercial applications and large commercial structures, including:



- **Superior tear strength** — up to five times greater than leading polymeric wraps and up to 20 times more than building paper.
- **Enhanced UV resistance** — up to 12 months of protection from UV degradation from the sun. This makes Typar MetroWrap an excellent choice for evolving construction schedules and an interim environmental barrier for interior construction.
- **Best water holdout** — protects interior environments during and after construction from air infiltration and damaging water.
- **Best surfactant resistance** — handles site exposure to harsh chemicals and cleaning techniques found on commercial jobsites.
- **Exceptional mold resistance** — will not support the growth of mold (ASTM D3273).
- **Improves Indoor Air Quality**
- **Excellent air barrier** — reduces energy costs over time; protects interior during construction.

Typar MetroWrap Typical Applications:



Commercial



Multi Family



Small Office Building



Hospitality



FOR COMMERCIAL APPLICATIONS

TYPICAL CHARACTERISTICS

Thickness		12.1 m
Basis Weight	Tappi T-410	3.5 oz/yd ²
Breaking Strength (grab tensile)	(ASTM D-5034) (ASTM D-5034)	93lbs MD 95lbs CD
Trapezoidal Tear Resistance	(ASTM D-1117)	60lbs MD 67lbs CD
Water Penetration Resistance	ATTC-127	980 cm
Air Penetration Resistance	Tappi T-460	>4800 sec/100cc
Water Vapor Transmission	ASTM E 96 Method A	10 Perms
Ultra Violet Light Exposure Resistance (UV)		12 months
Surface Burning Characteristics Flame Spread Index Smoke Development Index	ASTM E84	Class A Pass

ROLL SIZES

10 ft x 100 ft
5 ft x 150 ft

ICC Code Approval #ESR-1404

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*For more information, call 800-284-2780
or visit www.typar.com.*



Typar Weather Resistant Barrier products contain 25% post-individual recycled content which reduces the consumption of raw materials and our environmental footprint.

SPECIFICATIONS:

PART 1 – GENERAL

- 1.1 Summary
 - A. This Section specifies Typar MetroWrap applied as a water resistive barrier and air barrier assembly in exterior walls.
- 1.2 Submittals
 - A. Product Data: Submit manufacturer's product data and installation instructions.
 - B. Samples: Submit 12 inch (300 mm) square sample for approval.
- 1.3 Quality Assurance
 - A. Manufacturer: Obtain primary materials from a single manufacturer regularly engaged in manufacturing building wraps. Obtain secondary materials from a source acceptable to the primary materials manufacturer.
 - B. Installer: Minimum 2 years experience with installation of similar building wraps.
- 1.4 Delivery, Storage and Handling
 - A. Deliver materials and products in unopened factory labeled packages. Store and handle in strict compliance with manufacturer's instructions and recommendations. Protect from damage.

PART 2 – PRODUCTS

- 2.1 Materials
 - A. Building Wrap: Typar MetroWrap by Fiberweb, 70 Old Hickory Boulevard, Old Hickory, TN 37138, Tel: 800-284-2780; www.typar.com. Material shall comply with the following:
 1. Thickness: 0.121 inches average.
 2. Breaking Strength Test: 94 pounds mean value per ASTM D 5034.
 3. Water Vapor Transmission: 9.6 perms (grains per hr.in.Hg.sqft) per ASTM E96, desiccant method.
 4. Pliability: No signs of cracking per AC38, Sec. 3.3.4.
 5. Ultraviolet Exposure: No signs of failure at 21 days per AC 38, Sec. 4.1.2.
 6. Accelerated Aging Cycling: No signs of failure at 21 days per AC38.
 7. Water Resistance Test: Exceeds one hour per ASTM D779.
 8. Elongation: 1.9 inches mean value per ASTM D 5034, 4 inch wide sample.
 - B. Manufacturer's Accessory Products:
 1. Tape: Typar Construction Tape.
 2. Sealant: Approved Sealant.
 3. Flashing: Typar Flashing Flex, Typar Peel & Stick Flashing and Flashing RA.

PART 3 – EXECUTION

- 3.1 Examination
 - A. Prior to start of installation, inspect existing conditions to ensure surfaces are suitable for installation of MetroWrap, including removal of sharp protrusions and that substrate is dry.
- 3.2 Installation of MetroWrap
 - A. Installation: Comply with manufacturer's installation instructions including but not limited to the requirements specified in this section. Sequence construction such that MetroWrap is not exposed for more than 12 months before covering material is applied.
 - B. Overlaps: Install shingle style to shed water, with minimum 2 inch (50 mm) overlap horizontally, 6 inch (300 mm) overlap vertically, and 12 inches (600 mm) overlap at corners, at all locations where this is possible.
 - C. Fasteners at Wood Studs: Use manufacturer's recommended fasteners with plastic heads. Use 2 inch (50 mm) long plastic headed nails or plastic headed screws when 1/2 inch (12 mm) thick OSB sheathing is used.
 - D. Fasteners at Metal Studs: Use manufacturer's recommended fasteners with 2 inch (50 mm) plastic disk around shank of No. 10 stainless steel self-taping screws. Use 2 inch (50 mm) long screws when 1/2 inch (12 mm) thick gypsum board is used.
 - E. Fastening at Concrete Block and Poured Concrete: Adhesive recommended by manufacturer.
 - F. Fastener Pattern: Attach one fastener or more every 24 inches (600 mm) in horizontal and vertical direction.
 - G. Edge Seal Where Material is Sealed to Itself: Typar Construction Tape.
 - H. Edge Seal Where Material is Sealed to Adjacent Material: Install approved sealant on the substrate 1 inch (25 mm) to 2 inches (50 mm) back from the edge of the MetroWrap. Press MetroWrap into the sealant to seal to create air and water seal. If required by location of termination, provide furring strip to hold the MetroWrap in place.
 - I. Edge Seal at Penetrations: Install approved sealant on the substrate 1 inch (25 mm) back from the edge of the cut. Press MetroWrap into the sealant to create air and water seal. Install Typar Flashing Flex, Typar Peel & Stick Flashing or Flashing RA on the exterior of the MetroWrap to join the material to the penetration.
 - J. Final Inspection of MetroWrap: When each section is complete, the installer shall visually inspect the installation and verify that all rows of material have overlapped the row below it, that all materials and components have been installed in a shingle fashion, that the fasteners are the proper ones, that the nailing pattern is correct, that all penetrations and terminations have been done correctly and that doors and windows have been properly flashed and integrated into the MetroWrap material. The installer shall repair any cuts or tears with Typar Construction Tape.

Typar® StormWrap™

In high-wind and extreme weather areas where impact resistance is key, specify the fiber-reinforced wrap engineered to do the job — Typar StormWrap. It combines all the advantages of Typar HouseWrap with fiber-reinforcement for unprecedented impact resistance in a weather resistant barrier that also provides water holdout and tear strength, making it the ideal solution for extreme weather conditions. Designed to stop the penetration of wind-borne objects, high wind pressure cycles and wind lift conditions, it is highly recommended for high-wind and extreme weather areas. It's so strong, it is approved for both the Miami Dade County and Florida Building Codes.

Typar StormWrap goes where no other housewrap has gone before, providing:

- **Extreme weather protection** — extreme weather-, wind- and impact-resistance; storm-resistant protection for any house or building.
- **Structural and dimensional stability** — resistant to settling or movement.
- **Highest tear strength** — resists tears to maintain integrity on the job longer.
- **Exceptional drainage** — provides positive drainage on the backside.



Typar® StormWrap helps reduce air leaks in a house thereby reducing the energy consumption.



Typar Weather Resistant Barrier products contain 25% post-individual recycled content which reduces the consumption of raw materials and our environmental footprint.



FOR COMMERCIAL APPLICATIONS TYPICAL CHARACTERISTICS

Basis Weight	(ASTM D-5261)	7.6 osy
Thickness	(ASTM D-1777)	21.3 mils
Puncture Resistance	(ASTM D-4833-88)	413 lbs
Dry Tensile Strength	(ASTM D-5034)	233 lbs md 191 lbs xd
Pliability	(AC-38)	Pass
Moisture Vapor Transmission Rate	(ASTM E-96-95, procedure A)	9 U.S. perms
“Air-Ins” (Air Leakage Test)	(CCMC Technical Guide MF-07273)	0.003L/(S·M ²) @ 75 pascals
Ultra Violet Light Exposure Resistance (UV)		12 months
Water Resistance Test (Boat Test)	(ASTM D-779)	PASS
Water Ponding Test	(CCMC Technical Guide MF-07193)	PASS
Surface Burning Characteristics	(ASTM-E-84-00a)	
Flame Spread Index		Class A
Smoke Developed Index		PASS

ROLL SIZES

5 ft x 75 ft
10 ft x 50 ft

Miami Dade County Approved NOA. 07-0322.08
ICC Code Approval #ESR-2431

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*For more information, call 800-284-2780
or visit www.typar.com.*

SPECIFICATIONS:

PART 1 – GENERAL

- 1.1 Summary
 - This Section specifies Typar® StormWrap™ applied as a water resistive barrier and air barrier assembly in exterior walls.
- 1.2 Submittals
 - A. Product Data: Submit manufacturer's product data and installation instructions.
 - B. Samples: Submit 12 inch (300 mm) square sample for approval.
- 1.3 Quality Assurance
 - A. Manufacturer: Obtain primary materials from a single manufacturer regularly engaged in manufacturing building wraps. Obtain secondary materials from a source acceptable to the primary materials manufacturer.
 - B. Installer: Minimum 2 years experience with installation of similar building wraps.
- 1.4 Delivery, Storage and Handling
 - A. Deliver materials and products in unopened factory labeled packages. Store and handle in strict compliance with manufacturer's instructions and recommendations. Protect from damage.

PART 2 – PRODUCTS

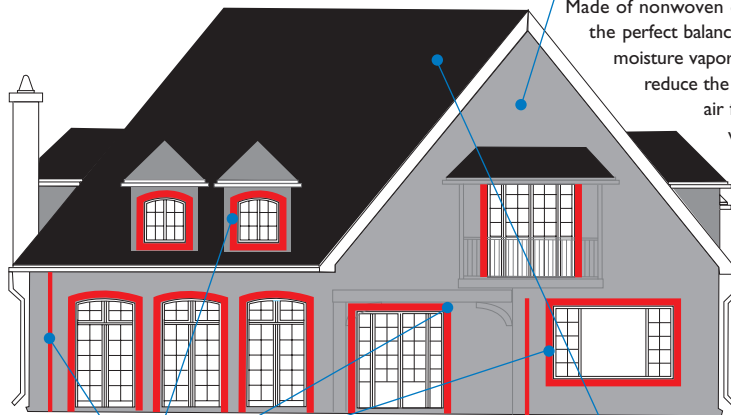
- 2.1 Materials
 - A. Typar® StormWrap™: Typar® StormWrap™ by Fiberweb Inc., 70 Old Hickory Boulevard, Old Hickory, TN 37138-3651, Tel: 615-847-7000; Fax: 6175-847-7068; www.typar.com. Material shall comply with the following:
 1. Thickness: 0.02 inches average.
 2. Breaking Strength Test: 212 pounds mean value per ASTM D 5034
 3. Pliability: No signs of cracking per AC38, Sec. 3.3.4.
 4. Ultraviolet Exposure: No signs of failure at 21 days per AC 38, Sec. 4.1.2.
 5. Accelerated Aging Cycling: No signs of failure at 21 days per AC38.
 6. Water Resistance Test: Exceeds 24 hours per ASTM D779.
 7. Elongation: 0.5 inches mean value per ASTM D 5034, 4 inch wide sample.
 8. Impact Resistance: impact weight >900 grams [er AST< D1709-04.
 - B. Manufacturer's Accessory Products:
 1. Tape: Typar® Construction Tape.
 2. Sealant: Recommended sealant by Typar®.
 3. Flashing: Typar® Flashing Flex, Typar® Peel & Stick Flashing and Typar® Flashing RA.

PART 3 – EXECUTION

- 3.1 Examination
 - A. Prior to start of installation, inspect existing conditions to ensure surfaces are suitable for installation of Typar® StormWrap™, including removal of sharp protrusions and that substrate is dry.
- 3.2 Installation of Typar® StormWrap™
 - A. Installation: Comply with manufacturer's installation instructions including but not limited to the requirements specified in this section. Sequence construction such that StormWrap is not exposed for more than 12 months before covering material is applied.
 - B. Overlaps: Install shingle style to shed water, with minimum 2 inch (50 mm) overlap vertically, 6 inch (150 mm) overlap horizontally, and 12 inches (300 mm) overlap at corners, at all locations where this is possible.
 - C. Fasteners at Wood Studs: Use manufacturer's recommended fasteners with plastic heads. Use 2 inch (50 mm) long plastic headed nails, plastic cap staple or plastic headed screws when 1/2 inch (12 mm) thick OSB sheathing is used.
 - D. Fasteners at Metal Studs: Use manufacturer's recommended fasteners with 1 inch (25 mm) plastic disk around shank of S-12 bugle head stainless steel self-taping screws. Use 2 inch (50 mm) long screws with plastic disk around shank when 1/2 inch (12 mm) thick gypsum board is used.
 - E. Fastening at Concrete Block and Poured Concrete: Adhesive recommended by manufacturer.
 - F. Fastener Pattern: 16 inches (400 mm) vertical fastener spacing for both 16 and 24 inches on center frame stud spacing. Alternatively, furring strips can be used at a spacing of 16 inches (400 mm) for 16 inch stud-spaced frames or 24 inches (600 mm) for 24 inches stud-spaced frames.
 - G. Edge Seal Where Material is Sealed to Itself: Typar® Construction Tape.
 - H. Edge Seal Where Material is Sealed to Adjacent Material: Install Typar® recommended sealant on the substrate 1 inch (25 mm) to 2 inches (50 mm) back from the edge of the Typar® StormWrap™. Press building wrap into the sealant to seal to create air and water seal. If required by location of termination, provide furring strip to hold the Typar® StormWrap™ in place.
 - I. Edge Seal at Penetrations: Install Typar® recommended sealant on the substrate 1 inch (25 mm) back from the edge of the cut. Press Typar® StormWrap™ into the sealant to create air and water seal. Install Typar® Flashing Flex, Typar® Straight Flashing or Typar® Flashing RA on the exterior of the Typar® StormWrap™ to join the material to the penetration.
 - J. Final Inspection of Typar® StormWrap™: When each section is complete, the installer shall visually inspect the installation and verify that all rows of material have overlapped the row below it, that all materials and components have been installed in a shingle fashion, that the fasteners are the proper ones, that the nailing pattern is correct, that all penetrations and terminations have been done correctly and that doors and windows have been properly flashed and integrated into the Typar® StormWrap™ material. The installer shall repair any cuts or tears with Typar® Construction Tape.

The Typar Weather Protection System.

RESIDENTIAL



HouseWrap and StormWrap

The foundation for the Weather Protection System. Made of nonwoven composite fabric, they provide the perfect balance of water/air holdout and moisture vapor transmission (MVT). They reduce the chance of exterior water and air from entering the wall cavity while allowing moisture vapor from inside the home to escape the wall cavity.

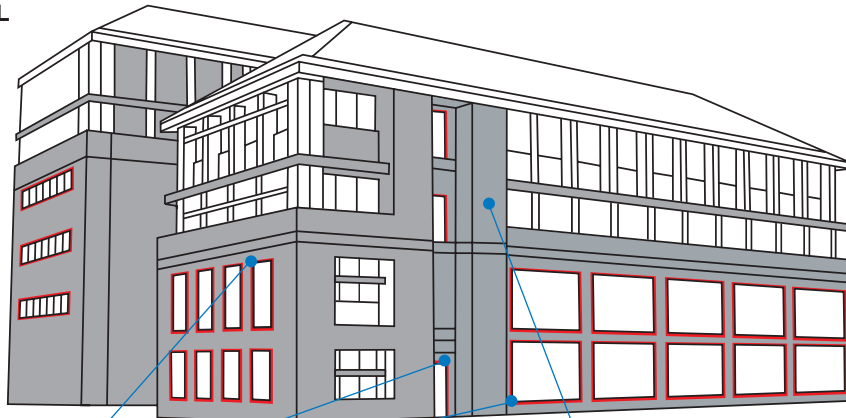
Accessories

Typar offers three flashing options to ensure seal integrity around doors, windows and other exterior rough openings. Typar® Flashing RA™ offers affordable, best-in-class performance. Typar® Peel & Stick Flashing is the original premium butyl-based flashing. Typar® Flashing Flex is also butyl based and is perfect for sealing around arched windows. Typar® Construction Tape is a strong, polypropylene film, coated with a powerful all-weather acrylic adhesive that seals out the elements.

RoofWrap™30

Typar® RoofWrap 30 is a high strength polypropylene underlayment. It's a tough, weather-resistant fabric, engineered to protect the roof under the harshest conditions. It's the ideal choice under shingles, shakes, tiles, slate and metal roofs, and resists tearing away even in high winds.

COMMERCIAL



Accessories

Our same great flashing products and construction tape used for residential are also tough enough to stand up to the most demanding commercial applications.

MetroWrap

Used on multi-family and other commercial applications where a heavier wrap with superior tear strength, MVT and water holdout is required.

Made in the U.S.A.



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Fiberweb, Inc.
70 Old Hickory Blvd.
Old Hickory, TN 37138 USA
1-800-284-2780 • Fax: 615-847-7068
www.typar.com

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