



rFOIL® Ultra NT Radiant Barrier – 3-Part Specification

PART 1 — GENERAL

1.01 SUMMARY

Provide rFOIL® Ultra NT Radiant Barrier, a heavy-duty radiant barrier sheet designed for use in Sensitive Compartmented Information Facilities (SCIFs) and other secure environments requiring electromagnetic shielding and vapor barrier protection. The radiant barrier provides high reflectivity, low emissivity, and effective shielding performance when installed on walls, ceilings, and floors.

1.02 RELATED DOCUMENTS

- A. **Technical Data Sheet** – rFOIL® Ultra NT Radiant Barrier (see Data Sheet link on product page).
- B. [Product Brochure](#) — TÜV-SÜD Low Emissions / Pollutant Tested Certificate
- C. [Product Page](#) – FOIL® Ultra NT SCIFs Radiant Barrier

1.03 REFERENCES

Standards referenced:

- ASTM C1313 — Sheet Radiant Barriers for Building Construction Applications.
- ASTM C1371 — Determination of Emittance of Materials.
- ASTM D2261 — Tear Strength of Fabrics.
- ASTM D3310 — Corrosivity of Adhesive Materials.
- ASTM D4935 — Electromagnetic Shielding Effectiveness of Planar Materials.
- ASTM E84 — Surface Burning Characteristics of Building Materials.
- ASTM E96 — Water Vapor Transmission of Materials.
- ASTM C1338 — Fungi Resistance of Insulation Materials.
- IEEE 299 — Method for Measuring Effectiveness of Electromagnetic Shielding Enclosures.

SUBMITTALS

- A. Product data including installation instructions, material specifications, and physical properties.
- B. Manufacturer's certification confirming compliance with specified performance requirements.
- C. Manufacturer's warranty documentation.



1.05 QUALITY ASSURANCE

- A. Manufacturer qualifications: Manufacturer regularly engaged in production of radiant barrier materials of similar type for a minimum of **10 years**.
 - B. Product shall meet applicable ASTM and IEEE standards for shielding effectiveness and material performance.
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PART 2 — PRODUCTS

2.01 MANUFACTURER

Coverttech Fabricating, Inc.
279 Humberline Drive
Etobicoke, Ontario M9W 5T6, Canada
Phone: 416-798-1340
Website: www.rfoil.com
Product: rFOIL® Ultra NT Radiant Barrier

2.02 MATERIALS

- A. **Radiant Barrier:** rFOIL® Ultra NT heavy-duty radiant barrier sheet.
- B. **Construction:** Single layer of woven polyethylene material bonded and sandwiched between two reflective aluminum surfaces.
- C. **Function:** Radiant barrier and vapor barrier providing reflective insulation and electromagnetic shielding.
- D. **Edge Type:** Square.

2.03 PERFORMANCE CHARACTERISTICS

- A. **Emissivity (ASTM C1371):** 0.03
- B. **Reflectivity:** 0.97
- C. **Fire Rating (ASTM E84):** Class A / Class 1
- D. **Water Vapor Permeability (ASTM E96):** 0.01 perms
- E. **Corrosiveness (ASTM D3310):** Pass
- F. **Fungi Resistance (ASTM C1338):** Pass
- G. **Tear Resistance (ASTM D2261):** Length: 14.93 | Width: 15.13
- H. **Shielding Effectiveness:** 85 dB from 100 MHz to 10 GHz per IEEE 299 and ASTM D4935.
- I. **Weight:** Approximately 15 lbs per 500 sq ft roll.

2.04 ACCESSORIES

- A. [rFOIL Conductive Aluminum Tape for SCIF](#)
 - B. [3M Aluminum Conductive Adhesive Tape for SCIF – 5 rolls](#)
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PART 3 — EXECUTION

3.01 EXAMINATION

- A. Examine surfaces to receive radiant barrier installation.
- B. Do not begin installation until unsuitable conditions have been corrected.

3.02 INSTALLATION

- A. Install radiant barrier in accordance with manufacturer's instructions and project drawings.
- B. Install radiant barrier on all walls, ceilings, and floors of designated secure areas.
- C. Attach radiant barrier to framing as recommended by manufacturer.
- D. Overlap joints a minimum of **6 inches**.
- E. Seal seams with aluminum foil adhesive tape supplied by manufacturer.
- F. Extend radiant barrier a minimum of **6 inches** across wall-to-ceiling and wall-to-floor intersections to maintain continuous shielding.

3.03 PROTECTION

Protect installed radiant barrier from damage during construction.

DOCUMENTS FOR ATTACHMENT / REFERENCE

You should attach the following reference materials with your spec package:

1. Technical Sheet - [rFOIL® Ultra NT Perforated SCIF Radiant Barrier](#)
2. Technical Sheet - [rFOIL® Ultra NT Solid SCIF Radiant Barrier](#)
3. Warranty - [rFOIL® Ultra NT SCIF Radiant Barrier](#)
4. Press Release - [rFOIL® Ultra NT SCIF Radiant Barrier](#)