

**2002**

Advanced Building Products, Inc., P.O. Box 98, Springvale, Maine 04083  
TEL: 800-252-2306; FAX: 207-490-2998; WEBSITE: www.advancedflashing.com

## SECTION 07651

### FLEXIBLE COPPER SHEET FLASHINGS

Advanced Building Products, Inc. manufacturer many types of flexible copper sheet flashings. Due to their ductility, high tensile strength, and resistance to mortar acid and alkali action, copper flashings are well suited as through wall flashings for masonry assemblies. There are many other non-masonry applications for sheet copper flashings such as clay tile roofs. This product guide specification can be used to specify the following sheet copper flashings manufactured by Advance Building Products, Inc.:

Advanced Copper Fabric Flashing

Cop-R-Cote

Cop-R-Kraft

Cop-R-Kraft Duplex

Cop-R-Kraft Plus Lead

Cop-R-Kraft Duplex Plus Lead

The specifier will need to select applicable products and requirements and delete non-applicable products. In some instances, it may be appropriate to select a copper flashing specification from this guide and insert it into another section such as SECTION 04800 - MASONRY ASSEMBLIES or SECTION 07600 - FLASHING AND SHEET METAL. The various paragraphs of this guide section will need to be inserted in the appropriate locations in either Part 1, 2, or 3. This guide might also be combined with other guides to develop SECTION 04090 - MASONRY ACCESSORIES. \*\*\*\*\*

### PART 1 - GENERAL

#### 1.1 SUMMARY

A. Section includes:

\*\*\*\*\* List other specification sections dealing with work directly related to this section such as the following. \*\*\*\*\*

1. Section 04800 - Masonry Assemblies: Installation of copper flashings as part of masonry wall construction.
2. Section 07320 - Roof Tiles: Installation of copper flashing as part of clay roof tile installation.

#### 1.2 REFERENCES

- A. ASTM B370 - Copper Sheet and Strip for Building Construction.
- B. ASTM D2822 - Asphalt Roof Cement.

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- C. ASTM E154 - Water Vapor Retarders Used in Contact with Earth Under Concrete Slabs, or Walls, or as Ground Cover.

### **1.3 SUBMITTALS**

- A. Provide in accordance with Section 01330 - Submittal Procedures:
  - 1. Product data and installation instructions.
  - 2. [2 by 2] [51 by 51 mm] minimum sample of copper flashing[s].

## **PARTS 2 - PRODUCTS**

### **2.1 ACCEPTABLE MANUFACTURERS**

- A. Advanced Building Products, Inc., P.O. Box 98, Springvale, Maine 04083; 800-252-2306; www.advancedflashing.com
- B. Manufacturers of equivalent products submitted and approved in accordance with Section 01630 - Product Substitutions Procedures.

### **2.2 PRODUCTS**

**\*\*\*\*\* Include the following paragraph to specify Advanced Copper Fabric Flashing, a single copper sheet bonded on both sides to asphalt coated glass fabric.**

- A. Sheet copper flashing:
  - 1. Type: 5 layers, flexible flashing consisting of copper sheet bonded on both sides to asphalt coated glass fabric; Advanced Copper Fabric as manufactured by Advanced Building Products, Inc.
  - 2. Characteristics: Waterproof, flexible, high tensile strength, resistant to mortar acid and alkali action, allowing minimum thermal cold flow through structure, and textured surface promoting mortar joint bonding.

**Advanced Copper Fabric Flashing is fabricated with either 2, 3, 5, or 7 ounces per square foot copper sheet.**

**\*\*\*\*\***

- 3. Copper sheet: Full, single copper sheet weighing [2] [3] [5] [7] ounces per square foot and complying with ASTM B370.
- 4. Coating: Asphalt bonded to copper and covered with coarsely woven, heavy glass fabric reinforcing.

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5. Roll width: [36 inches.] [914 mm.]

\*\*\*\*\*

**\*\*\*\*\* Include the following paragraph to specify Cop-R-Cote Flashing, a single copper sheet coated on both sides with plasticized asphalt compound.**

B. Sheet copper flashing:

1. Type: 3 layers, flexible flashing consisting of copper sheet coated on both sides to plasticized asphalt compound; Cop-R-Cote as manufactured by Advanced Building Products, Inc.
2. Characteristics: Waterproof, flexible at extreme temperatures, high tensile strength, resistant to mortar acid and alkali action, self-sealing at punctures and allowing minimum thermal cold flow through structure.

**Cop-R Cote Flashing is fabricated with either 2, 3, 5, or 7 ounces per square foot copper sheet.**

\*\*\*\*\*

3. Copper sheet: Full, single copper sheet weighing [2] [3] [5] [7] ounces copper per square foot and complying with ASTM B370.
4. Coating: Plasticized asphalt compound weighing 6 ounces per square foot minimum.
5. Roll width: [36 inches.] [914 mm.]

\*\*\*\*\*

**\*\*\*\*\* Include the following paragraph to specify Cop-R-Kraft Flashing, a single copper sheet bonded on one side by asphalt to waterproof, creped, kraft paper. Since Cop-R-Kraft Flashing has one exposed copper surface with low bond ability, it is not recommended as masonry flashing.**

C. Sheet copper flashing:

1. Type: 3 layers, flexible flashing consisting of copper sheet bonded on one side by asphalt to waterproof, creped, kraft paper; Cop-R-Kraft Flashing as manufactured by Advanced Building Products, Inc.
2. Characteristics: Waterproof, flexible, high tensile strength, chemical resistant, and allowing minimum thermal cold flow through structure. Suitable for frame construction. Not recommended for masonry joint flashings.

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**Cop-R-Kraft Flashing is fabricated with either 1, 2, or 3 ounces per square foot copper sheet. \*\*\*\*\***

3. Copper sheet: Full, single copper sheet weighing [1] [2] [3] ounces per square foot and complying with ASTM B370.

**\*\*\*\*\* Cop-R-Kraft Flashing fabricated with 3 ounces per square foot copper sheet is provided with kraft paper reinforced with heavy fibers. This flashing meets FHA requirements. \*\*\*\*\***

4. Coating: Heavy, waterproof, creped, kraft paper [reinforced with heavy fibers,] and bonded to copper with asphalt.
5. Roll width: [36 inches.] [914 mm.]

\*\*\*\*\*

**\*\*\*\*\* Include the following paragraph to specify Cop-R-Kraft Duplex Flashing, a single copper sheet bonded on both sides by asphalt to waterproof, creped, kraft paper.**

D. Sheet copper flashing:

1. Type: 5 layers, flexible flashing consisting of copper sheet bonded on both sides by asphalt to waterproof, creped, kraft paper; Cop-R-Kraft Duplex Flashing as manufactured by Advanced Building Products, Inc.
2. Characteristics: Waterproof, flexible, high tensile strength, resistant to mortar acid and alkali action, allowing minimum thermal cold flow through structure, and rough textured surface promoting mortar joint bonding.

**Cop-R-Kraft Duplex Flashing is fabricated with either 1, 2, 3, or 5 ounces per square foot copper sheet.**

**\*\*\*\*\***

3. Copper sheet: Full, single copper sheet weighing [1] [2] [3] [5] ounces per square foot and complying with ASTM B370.

**\*\*\*\* Cop-R-Kraft Duplex Flashing fabricated with 3 or 5 ounces per square foot copper sheet is provided with kraft paper reinforced with heavy fibers. These flashings meet FHA requirements. \*\*\*\*\***

4. Coating: Heavy, waterproof, creped, kraft paper [reinforced with heavy fibers,] and bonded to copper with asphalt.
5. Roll width: [36 inches.] [914 mm.]

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\*\*\*\*\*

**\*\*\*\*\* Include the following paragraph to specify Cop-R-Kraft Plus Lead Flashing, a single bi-metal sheet of lead and copper bonded on one side by asphalt to waterproof, creped kraft paper. Since Cop-R-Kraft Plus Lead Flashing has one exposed metal surface with low bond ability, it is not recommended as masonry flashing.**

E. Copper and lead flashing:

1. Type: 3 layers, flexible flashing consisting of single bi-metal sheet of lead and copper bonded on one side by asphalt to waterproof, creped kraft paper; Cop-R-Kraft Plus Lead Flashing as manufactured by Advanced Building Products, Inc.
2. Characteristics: Waterproof, flexible, high tensile strength, chemical resistant, and allowing minimum thermal cold flow through structure. Suitable for frame construction. Not recommended for masonry joint flashings.

**Cop-R-Kraft Plus Lead Flashing is fabricated with either 2 or 3 ounces per square foot lead coated copper sheet.**

\*\*\*\*\*

3. Core sheet: Single copper and lead sheet and weighing [2] [3] ounces per square foot and complying with ASTM B101.
4. Coating: Heavy, waterproof, creped, kraft paper reinforced with heavy fibers, and bonded to core with asphalt.
5. Roll width: [36 inches.] [914 mm.]

\*\*\*\*\*

**\*\*\*\*\* Include the following paragraph to specify Cop-R-Kraft Duplex Plus Lead Flashing, a single bi-metal sheet of lead and copper bonded on both sides by asphalt to waterproof, creped, kraft paper.**

F. Sheet copper and lead flashing:

1. Type: 5 layers, flexible flashing consisting of bi-metal sheet of lead and copper bonded on both sides by asphalt to waterproof, creped, kraft paper; Cop-R-Kraft Duplex Plus Lead Flashing as manufactured by Advanced Building Products, Inc.
2. Characteristics: Waterproof, flexible, high tensile strength, resistant to mortar acid and alkali action, allowing minimum thermal cold flow through structure,

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and rough textured surface promoting mortar joint bonding.

**Cop-R-Kraft Duplex Plus Lead Flashing is fabricated with either 2, 3, 5, or 7 ounces per square foot lead coated copper sheet.**

\*\*\*\*\*

- 3. Core sheet: Single sheet of lead and copper weighing [2] [3] [5] [7] ounces per square foot and complying with ASTM B101.
- 4. Coating: Heavy, waterproof, creped, kraft paper reinforced with heavy fibers, and bonded to core with asphalt.
- 5. Roll width: [36 inches.] [914 mm.]

\*\*\*\*\*

- G. Flashing mastic: Fibrated, trowel grade mastic consisting of asphalt, mineral stabilizers, and interfibe complying with ASTM D2822, Type 1; Cop-R-Tite Flashing Mastic as manufactured by Advanced Building Products, Inc.

**PART 3 - EXECUTION**

**3.1 PREPARATION**

**\*\*\*\*\* Include the following three paragraphs if copper flashings are installed as part of masonry construction. \*\*\*\*\***

- A. Coordinate installation of flashings with erection of masonry walls to ensure material is provided in timely manner for embedment in mortar joints.
- B. Inspection: Verify masonry surfaces to receive through-wall flashings are smooth, free of loose materials, and properly sloped to provide drainage.
- C. Verify that adequate weep holes and mortar deflection devices are being installed to provide proper drainage at flashing locations.

**\*\*\*\*\* Include the following paragraph if copper flashings are installed as part of clay tile roof construction. \*\*\*\*\***

- D. Coordinate installation of flashings with installation of clay roof tiles to ensure material is provided in timely manner for attachment to roof substrate.

**3.2 INSTALLATION**

- A. Install flashings in accordance with Drawings, approved shop drawings, and manufacturer's recommended installation instructions.

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- B. Install copper flashings at all [foundation sills] [window and door sills and heads] [spandrels] [parapets] [through-wall conditions] [\_\_\_\_\_] and other locations as detailed on Drawings.

**\*\*\*\*\* Edit the following paragraphs to reflect project conditions and required applications. \*\*\*\*\***

C. Masonry applications:

1. Horizontal masonry joint flashing: Lay in slurry of fresh mortar and top with full mortar bed. Continue flashing through wall. Leave exposed at exterior for inspection. After inspection, cut flush with masonry surface.
2. Vertical masonry surfaces: Spot surface with mastic to hold in place until masonry is set. Secure flashing in back wall mortar joint or reglet.
3. Foundation sill flashing: Lay in slurry of fresh mortar and top with full mortar bed. Leave flashing flush with exterior masonry surface.
  - a. On inside turn up flashing [2 inches] [51 mm] minimum or continue flashing upward across cavity [6 inches] [152 mm] minimum and secure in back wall mortar joint or reglet.
  - b. At sill and column intersections, extend flashing up column [10 inches] [254 mm] and secure with mastic and termination bar.
4. Cavity wall flashing: Lay in slurry of fresh mortar and top with full mortar bed. Leave flashing flush with exterior masonry surface. Continue flashing upward across cavity [6 inches] [152 mm] minimum and secure in back wall mortar joint or reglet.
5. Spandrel flashing: Start flashing at shelf angle toe, continue up beam, turn through wall, and turn up [2 inches] [51 mm] minimum on inside.
6. Parapet and coping flashings: Lay in slurry of fresh mortar and top with full mortar bed. Leave flashing flush with exterior and interior masonry surfaces.
7. Head and sill flashings: Start flashing flush with exterior wall surface or lintel and continue through or up wall. Extend flashing [6 inches] [152 mm] on each side of opening and turn up forming pan. Fold corners; do not cut.

D. Frame construction applications:

1. Sill flashings and termite guards: Lay flashing in coating of mastic with metal face down. Extend [2 inches] [51 mm] on both side of foundation wall. Where

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pierced by anchor bolts, seal with mastic.

2. Head flashing: Extend [4 inches] [102 mm] above trim and behind sheathing or sheathing paper. Turn flashing down over drip cap edge. Extend flashing [6 inches] [152 mm] beyond each side of opening.
  3. Sill flashing: Secure to back of wood sill. Carry downward over sheathing and secure to sill plate. Carry beyond opening and form pan by folding. Do not cut.
- E. Vapor barrier under floors: Ensure substrate is dry, smooth, and free of loose material. Use maximum width material. Lay barrier material with metal face down in coating of mastic. Butt joints. Roll from center to edge with 50 to 100 pounds roller. Remove excess mastic.
- F. Lap joints: Coat contacting surfaces with mastic and lap [4 inches] [102 mm] minimum. Roll with hand roller until mastic bead appears at edges.

### **3.3 FIELD QUALITY CONTROL**

- A. After installation of flashings [and completion of masonry assemblies], inspect work.
1. Verify flashings have been properly installed at all required locations to prevent water penetration.
  2. Verify weep holes have been provided to ensure proper drainage to exterior.
- B. Water test flashings at [minimum of [3] [\_\_\_\_\_] locations] [locations designated by Architect] to verify flashing has been properly installed and moisture drains through weep holes.
- C. Trim exposed flashings flush with masonry surface.

**END OF SECTION**