

**SECTION 05551**

**ALUMINUM STAIR NOSINGS**

**\*\*\*\*\* UPNOVR, Inc. manufactures several types of aluminum stair nosings which can be specified with this product guide specification. The specifier will need to select appropriate products and options and delete others. \*\*\*\*\***

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**PART 1 - GENERAL**

**1.1 SUMMARY**

**\*\*\*\*\* UPNOVR, Inc. manufactures three types of aluminum stair nosings. Select required type in the following paragraph and delete non-applicable types. \*\*\*\*\***

A. Section includes:

- 1. Ultra 1500 series extruded one component, aluminum stair nosing for installation in [new cast concrete stairs] [new steel pan concrete filled stairs].
- 2. Ultra 2500 series extruded one component, aluminum stair nosing for installation in [new cast concrete stairs] [new steel pan concrete filled stairs].
- 3. Ultra 3500 series extruded stair nosings for repair of existing stair treads and nosings.

B. Related sections:

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

- 1. Section 03300 - Cast-in-Place Concrete: Cast concrete stairs to receive stair nosings.
- 2. Section 05515 - Metal Stairs: Steel pan stairs to receive stair nosings.

**1.2 REFERENCES**

A. American Society for Testing and Materials (ASTM) Publications:

- 1. ASTM B221 - Aluminum-Alloy Extruded Bar, Rod, Wire, Shape, and Tube.

B. ICC/ANSI A117.1 - International Code Council/American National Standards Institute Standard on Accessible and Useable Buildings and Facilities.

C. Federal Test Method Standard - 501A – Standard for Fire Safety Criteria

**1.3 SUBMITTALS**

A. Provide in accordance with Section 01330 - Submittal Procedures:

1. Product data for stair nosings.
2. Installation and maintenance instructions.

**1.4 QUALITY ASSURANCE**

A. Stair nosings shall be provided and installed to comply with ICC/ANSI A117.1.

**PART 2 - PRODUCTS****2.1 ACCEPTABLE MANUFACTURERS**

- A. UPNOVR, Inc., 3 Crane Way, Hooksett, New Hampshire 03106; 603-625-8639.
- B. Substitutions are not permitted

**2.2 MATERIALS**

- A. Extruded aluminum: ASTM B221, Alloy 6063 Temper T-6, mill finish.
- B. Ultra 1500 & 3500 series abrasive filler: Contains approximately 62% virgin grain Aluminum Oxide abrasive.
- C. Ultra 2500 series abrasive filler: Contains approximately 60% virgin grain Aluminum Oxide abrasive. Binder: Resilient epoxy type, fully cured. Epoxy binder to filler ratio to be 13% minimum.

**\*\*\*\*\* UPNOVR, Inc. offers 8 standard colors for abrasive filler. As a special order, custom colors can be obtained. Contact UPNOVR, Inc. for information regarding custom color option. \*\*\*\*\***

- C. Filler color: [[Black] [Gray] [Red] [Safety yellow] [Brown] [Green] [Tan] [Blue]] [Custom color designated by Architect] [Selected by Architect from manufacturer's standard range].

**2.3 ONE COMPONENT RIBBED STAIR NOSINGS; ULTRA Tread 1500 series**

**\*\*\*\*\* Use this article to specify Ultra Tread 1500 series, a one component aluminum stair nosing with abrasive epoxy filler strips separated by exposed aluminum ribs. \*\*\*\*\***

- A. Type: Extruded aluminum 6063-T6 alloy, with abrasive epoxy filler strips separated by exposed aluminum ribs and available with or without full length extruded anchor; ULTRA 1500 Series Nosings as manufactured by UPNOVR, Inc.

**\*\*\*\*\* Ultra Tread 1500 Series is provided in 4 widths. Select required width in the following paragraph. It is recommended that nosings cast in concrete stairs be provided in lengths 3 inches less than width of stair and for steel pan stairs nosings be provided 1/8 inch less than stair. \*\*\*\*\***

- B. Heavy traffic use extruded aluminum Ultra Tread 1500 series as manufactured by UPNOVR, Inc., with continuous anchor for use on pour concrete and steel pan stairs. Also available with countersunk holes. For treads with no anchor specify model number without "A" designation.
- Model: 1510A; 1-7/8" wide x 1/4" thick for poured concrete stair.  
Model: 1530A; 3" wide x 1/4" thick for poured concrete stair.  
Model: 1540A; 4" wide x 1/4" thick for poured concrete stair.  
Model: 1560A; 6" wide x 1/4" thick for poured concrete stair.  
Model; 1515; 1-7/8" wide x 1/4" thick with 1-1/8" nose for steel pan stair.  
Model; 1535A; 3" wide x 1/4" thick with 1-1/8" nose for steel pan stair.  
Model; 1545A; 4" wide x 1/4" thick with 1-1/8" nose for steel pan stair.

**\*\*\*\*\* Flange overlapping stair edge for steel pan stairs can be specified with a [ 7 deg ] or a [ 10 deg ] bend for sloped risers.\*\*\*\*\***

## **2.4 ONE COMPONENT FULL-ABRASIVE STAIR NOSINGS; ULTRA Tread 2500 series**

**\*\*\*\*\* Use this article to specify Ultra Tread 2500 series, a one component aluminum stair nosing with a full coverage abrasive epoxy filler. \*\*\*\*\***

- A. Type: Extruded aluminum 6063-T6 alloy, with abrasive epoxy surface and full length extruded anchor; ULTRA Tread 2500 Series Full-Abrasive Nosings as manufactured by UPNOVR, Inc.

**\*\*\*\*\* ULTRA Tread 2500 Series is provided in 3 widths. Select required width in the following paragraph. It is recommended that nosings cast in concrete stairs be provided in lengths 3 inches less than width of stair and for steel pan stairs nosings be provided 1/8 inch less than stair. \*\*\*\*\***

- B. Heavy traffic use extruded aluminum Ultra Tread 2500 series as manufactured by UPNOVR, Inc., with continuous anchor for use on pour concrete and steel pan stairs. Also available with countersunk holes. For treads with no anchor specify model number without "A" designation.
- Model: 2510A; 3/4" wide x 1/4" thick for poured concrete stair.  
Model: 2521A; 2-1/16" wide x 1/4" thick for poured concrete stair.  
Model: 2531A; 3-1/16" wide x 1/4" thick for poured concrete stair.  
Model: 2541A; 4-1/16" wide x 1/4" thick for poured concrete stair.  
Model; 2525A; 2" wide x 3/8" thick with 1-1/8" nose for steel pan concrete stair.  
Model; 2535A; 3-1/16" wide x 3/8" thick with 1-1/8" nose for steel pan concrete

stair.

Model: 1545A; 4" wide x 1/4" thick with 1-1/8" nose for steel pan concrete stair.

Model: 2526A; 2-1/16" wide x 3/8" thick for sloped riser steel pan stair: Barrier free

Model: 2530A; 3-1/16" wide x 3/8" thick for sloped riser steel pan stair: Barrier free

Model: 2540A; 4-1/16" wide x 3/8" thick for sloped riser steel pan stair: Barrier free

## **2.5 RETROFIT STAIR NOSINGS; ULTRA Tread 3500 series**

- A. Type: Extruded aluminum 6063-T6 alloy, with abrasive epoxy filled ribs designed for renovating existing stairs; 3500 Series as manufactured by UPNOVR, Inc.

**\*\*\*\*\* 3500 Series is provided in 4 widths. Select required width in the following paragraph. \*\*\*\*\***

- B. Model: 3504; 4" wide x 5/16" thick.  
Model: 3509; 9" wide x 5/16" thick.  
Model: 3510; 10" wide x 5/16" thick used for landing coverage.  
Model: 3511; 11" wide x 5/16" thick.

**\*\*\*\*\* Flange overlapping stair edge for steel pan stairs can be specified with a [ 7 deg ] or a [ 10 deg ] bend for sloped risers. \*\*\*\*\***

- C. Stair nosing flange: 1-1/8 inches [inclined at 7 degrees angle from vertical].  
D. Provide renovation stair tread with countersunk holes for installation.

## **PART 3 - EXECUTION**

### **3.1**

**\*\*\*\*\* Use this article if Ultra Tread 1500 series or Ultra Tread 2500 series stair nosings are being installed. \*\*\*\*\***

- A. Install nosings according to manufacturer's instructions  
B. Center nosings in width of stair with uniform space on both sides.  
C. Install [stair nosing] [retainer component of stair nosing] after finishing concrete stair and prior to concrete set.  
D. Install flush with concrete and tight to edge of riser.  
E. Do not move or shift nosing after initial placement.  
F. Do not allow traffic over stairs with nosings until concrete is cured.

**3.2 ENOVATION STAIR TREAD INSTALLATION**

**\*\*\*\*\* Use this article if Ultra Tread 3500 series repair treads are being installed. \*\*\*\*\***

- G. Prior to submitting shop drawings and fabrication, inspect existing stairs. Verify size and profile of tread, conditions, position of stair railing. Determine proposed renovation stair tread is compatible with existing conditions.
- H. Install renovation stair tread on existing stairs according to manufacturer's instructions.
- I. Center treads in width of stair with uniform space on both sides.
- J. Provide expansion inserts and bolts of size and type recommended by stair tread manufacturer and as required for securely anchoring tread to existing stair.
- K. Surface mount on existing stair tread. Install flush with concrete and tight to edge of riser. Ensure that installed treads are securely anchored, fasteners are tight and flush, and that exposed edges do not pose tripping hazard.
- L. Protect finish of nosing until completion of construction.

**END OF SECTION**