**3-Part CSI MasterFormat Specification**

**SECTION 05 5000**

**Stair Treads and nosings**

Rev 02/24

1. GENERAL
	* + 1. SUMMARY
				1. Section includes:

Anti-slip Safety Stair Treads and Nosing’s for new construction and renovation, inside and outside stair applications including extruded aluminum and cast metal systems.

* + - 1. references
				1. State of California Title 24, Striping code for the visually impaired
				2. American Disability Act (ADA) barrier-free code design
				3. Occupational Safety and Health Association (OSHA)
				4. International Building Code (IBC)
				5. Underwriters Laboratories (UL) 1994 Luminous Egress Path Markings
				6. ASTM B 221 Standard Specification for Aluminum and Aluminum Alloy extruded bars, rods, wire, shapes and tubes.
				7. ASTM 2072 Standard Specification for Photoluminescent (Phosphorescent) Safety Markings.
			2. coordination
				1. Coordinate with other trades such as concrete and masonry.
			3. Action SUBMITTALS
				1. Shop Drawings: Indicate configuration and dimensions, show components, adjacent construction, required clearances and tolerance and other affected work.
				2. Product Data: Manufacturer’s technical data for each type of floor door, including setting drawings and finish requirements
			4. informational submittals
				1. Provide manufacturer's standard warranty.
				2. Sustainable Design Submittals:

Building Product Disclosure Requirements: To encourage the use of building products that are working to minimize their environmental and health impacts, provide the following information when available:

Material Ingredients Documentation demonstrating the chemical inventory of the product

* + - 1. Closeout submittals
				1. Manufacturer's Installation Instructions and Operation & Maintenance: Indicate installation, operation and maintenance requirements and rough-in dimensions.
1. PRODUCTS
	* + 1. MANUFACTURER
				1. Nystrom

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* + - 1. abrasive metal [NOSINGS] [TREADS] [AND] [THRESHOLDS]

Retain product and nosing types required and revise to suit Project. Delete all if configurations are indicated on Drawings.

* + - * 1. Single Part Unit: Aluminum with abrasive filler consisting of aluminum oxide, silicon carbide, or a combination of both, in an epoxy-resin binder.

Ribbed bar abrasive. Aluminum alternating with abrasive filler consisting of aluminum oxide, silicon carbide, or a combination of both, in an epoxy-resin binder

Basis of-Design Product: Nystrom, STSB

Nosing Types:

Short Nose Tread: **[1-7/8 inches (48 mm)] [3 inches (76 mm)] [4 inches (102 mm)]** wide, with 1/2 inch (13 mm) lip for poured concrete applications.

Attachment Method: [Cast-In, continuous extruded anchor] [Drilled Hole, Mechanically Fastened].

Short Tipped Nose: **[1-7/8 inches (48 mm)] [3 inches (76 mm)] [4 inches (102 mm)]** wide, with 1/4 inch (6 mm) lip for poured concrete and steel pan applications.

Attachment Method: [Cast-In, continuous extruded anchor] [Drilled Hole, Mechanically Fastened].

Angled Long Nose Tread**: [1-7/8 inches (48 mm)] [3 inches (76 mm)]** wide, with 1-1/8 inch (31 mm) lip, 83 degree angle for sloped risers.

Attachment Method: [Cast-In, continuous extruded anchor] [Drilled Hole, Mechanically Fastened].

Inset, Square Front and Back: [**1-3/8 inches** **(35 mm)**] [**3 inches** **(76 mm)**].

Attachment Method: [Cast-In, continuous extruded anchor] [Drilled Hole, Mechanically Fastened].

Finish: 6063-T5 aluminum, mill finish.

Abrasive Colors: **[Black] [Safety yellow] [see manufacturer for available color selections].**

Specify taped top or stair nosing guard to prevent concrete from penetrating tread during installation. Painted undersides create a barrier between metal and concrete to avoid adverse reaction.

Options:

Taped Top.

Painted Undersides.

Temporary Nosing Guard: Provide Short Tipped nosings with manufacturer's pre-installed heavy-duty, slip-resistant, removable nosing guard to provide protection of nosings during construction.

Full abrasive filler. Aluminum filled with abrasive consisting of aluminum oxide, silicon carbide, or a combination of both, in an epoxy-resin binder and aluminum extrusion.

Basis-of-Design Product: Nystrom; STSF

Nosing Types:

Short Nose Tread: **[2 inches (51 mm)] [3 inches (76 mm)] [4 inches (102 mm)]** wide, with 1/2 inch (13 mm) lip for poured concrete applications.

Attachment Method: [Cast-In, continuous extruded anchor] [Drilled Hole, Mechanically Fastened].

Short Tipped Nose: **[2 inches (51 mm)] [3 inches (76 mm)] [4 inches (102 mm)]** wide, with 1/4 inch (6 mm) lip for poured concrete and steel pan applications.

Attachment Method: Cast-In, continuous extruded anchor.

Long Nose Tread: **[2-1/8 inches (54 mm)] [3-1/8 inches (79 mm)] [4 inches (102 mm)]** wide, with 1-1/8 inch (31 mm) lip with 90 degree angle.

Attachment Method: [Cast-In, continuous extruded anchor] [Drilled Hole, Mechanically Fastened].

Inset, Square Front and Back: **[2-1/4 inches (57.2 mm)]**

Attachment Method: [Cast-In, continuous extruded anchor] [Drilled Hole, Mechanically Fastened].

Abrasive Colors: **[Black] [Safety yellow] [see manufacturer for available color selections**].

Finish: 6063-T5 aluminum, mill finish.

Specify taped top to prevent concrete from penetrating tread during installation. Painted undersides create a barrier between metal and concrete to avoid adverse reaction.

Options:

Taped Top.

Painted Undersides.

Renovation: Aluminum channel with 1 inch (25 mm) tapered back, abrasive filler consisting of aluminum oxide, silicon carbide, or a combination of both, in an epoxy-resin binder.

Basis-of-Design Product: Nystrom STRB

Nosing Types:

Long Nose Tread: **[5 inches (127 mm)] [9 inches (229 mm)] [11 inches (280 mm)]** wide, with 1-1/8 inch (31 mm) lip with 90 degree angle.

Attachment Method: Drilled Hole, Mechanically Fastened.

Angled Nose Tread: **[5 inches (127 mm)] [9 inches (229 mm)] [11 inches (280 mm)]** wide, with 1-1/8 inch (31 mm) lip with 83 degree angle.

Attachment Method: Drilled Hole, Mechanically Fastened.

Rounded (Bull) Nose Tread: 4 inches (102 mm) wide, with 1-3/16 inch (30.2 mm) lip.

Attachment Method: Drilled Hole, Mechanically Fastened.

Abrasive Colors: **[Black] [Safety yellow] [see manufacturer for available color selections]**.

Finish: 6063-T5 aluminum, mill finish.

Specify taped top to prevent concrete from penetrating tread during installation. Painted undersides create a barrier between metal and concrete to avoid adverse reaction.

Options:

Taped Top.

Painted Undersides.

* + - * 1. Two Part Extruded Units: One-part, Sub-channel and plywood insert; second part, Aluminum, with abrasive filler consisting of aluminum oxide, silicon carbide, or a combination of both, in an epoxy-resin binder.

Basis-of-Design Product: provide Nystrom **[Ribbed Bar Abrasive, STTB] [Full Abrasive, STTF]** with abrasive filler strips and aluminum extrusion.

Nosing Type:

Short Tipped Nose: 3-3/8 inches (86 mm) wide, with 1/2 inch (13 mm) lip for poured concrete and steel pan applications.

Attachment Method: [Cast-In, continuous extruded anchor] [Drilled Hole, Mechanically Fastened].

Abrasive Colors: **[Black] [Safety yellow] [see manufacturer for available color selections]**

Finish: 6063-T5 aluminum, mill finish.

Specify taped top to prevent concrete from penetrating tread during installation. Painted undersides create a barrier between metal and concrete to avoid adverse reaction.

Options:

Taped Top.

Painted Undersides.

* + - 1. Photoluminescent [abrasive] [translucent resin] metal [NOSINGS] [TREADS] [AND] [THRESHOLDS]

Retain product and nosing types required and revise to suit Project. Delete all if configurations are indicated on Drawings.

* + - * 1. Extruded Units: Aluminum with Photoluminescent **[53 mil Resin Strip] [16 mil abrasive grit]** and **[abrasive filler consisting of aluminum oxide, silicon carbide][EcoTread]**, or a combination of both, in an epoxy-resin binder

Basis-of-Design Product: provide Nystrom STSM

Two-Part Short Tipped Ribbed Bar Abrasive Nosing 3-3/8 inch (86 mm) with 1 inch (25 mm) and 2 3/8 inch (60.3mm) **[abrasive filler][EcoTread]**, continuous extruded anchor attachment method. Nystrom Model: STTM-P3.375E

Ribbed Abrasive Short Tipped Nose: 3 inches (76 mm) wide, 1 inch (25 mm) Photoluminescent **[53 mil Resin Strip] [16 mil abrasive grit]** and2 inch (51 mm) **[abrasive filler][EcoTread].** Nystrom Model: STSM-P3E

Attachment method: [Cast-In, continuous extruded anchor] [Drilled Hole, Mechanically Fastened].

Inset, Square Front and Back: 3 inches (76 mm) with 1-inch (25 mm) **Photoluminescent [53 mil Resin Strip] [16 mil abrasive grit]** and 2 inch (51 mm) **[abrasive filler][EcoTread]**. Nystrom Model: STSM-N3E

Attachment method: [Cast-In, continuous extruded anchor] [Drilled Hole, Mechanically Fastened].

Specify taped top or stair nosing guard to prevent concrete from penetrating tread during installation. Painted undersides create a barrier between metal and concrete to avoid adverse reaction.

Options:

Taped Top.

Painted Undersides

Temporary Nosing Guard: Provide Short Tipped Single Part nosings with manufacturer's pre-installed heavy-duty, slip-resistant, removable nosing guard to provide protection of nosings during construction

* + - * 1. Extruded Units: Aluminum with abrasive filler consisting of aluminum oxide, silicon carbide, or a combination of both, in an epoxy-resin binder.

Basis-of-Design Product: Subject to compliance with requirements, provide Nystrom; STSB, STTB

Retain types required and revise to suit Project. Delete all if configurations are indicated on Drawings

Two-Part Short Tipped Nose Ribbed Bar Abrasive Nosing 3-3/8 inch (86 mm) with 1 inch (25 mm) 16 mil abrasive photoluminescent grit and 2 3/8 inch (60.3mm) **[abrasive filler][EcoTread]** . Cast-in, continuous extruded anchor attachment method. Nystrom Model: STTB-P3.375E-V2FC1

Ribbed Abrasive Short Tipped Nose: 3 inches (76 mm) wide, 1 inch (25 mm) 23 mil abrasive Photoluminescent grit and 2 inches (51 mm) **[abrasive filler][EcoTread]** . Cast-in, continuous extruded anchor attachment method. Nystrom Model: STSB-P3E-V2FC1

Options

Taped Top.

Painted Undersides

Temporary Nosing Guard: Provide Short Tipped Single Part nosings with manufacturer's pre-installed heavy-duty, slip-resistant, removable nosing guard to provide protection of nosings during construction.

* + - * 1. Extruded Units for Renovation: Aluminum channel with 1 inch (25 mm) tapered back, Photoluminescent **[53 mil Resin Strip] [16 mil abrasive grit].**

Basis-of-Design Product: Subject to compliance with requirements, provide Nystrom; STRM-R2A

* + - * 1. Photoluminescent Tapered Edge Translucent Resin Extrusion for Perimeter landing, exit path, door hardware, & door frame, Self-Adhesive 1 inch by 100 feet (25mm by 30.4 Meters). Nystrom Model: BEM-DS1-100.
			1. ecotread RECYCLED RUBBER AND EXTRUDED ALUMINUM [NOSINGS] [TREADS] [AND] [THRESHOLDS]
				1. Extruded Units: Aluminum, with EcoTread slip resistant, replaceable, recycled rubber.
1. Basis of-Design Product: Nystrom, STSB-ECO, STRB-ECO
2. Nosing Types:

a. Short Nose Tread: **[1-7/8 inches (48 mm)] [3 inches (76 mm)] [4 inches (102 mm)]** wide, with 1/2

 inch (13 mm) lip for poured concrete applications, with EcoTread recycled rubber.

 Nystrom Model: STSB-C1.875E-ECO, STSB-C3E-ECO, STSB-C4E-ECO

1) Attachment Method: [Cast-In, continuous extruded anchor] [Drilled Hole, Mechanically Fastened].

b. Short Tipped Nose: **[1-7/8 inches (48 mm)] [3 inches (76 mm)] [4 inches (102 mm)]** wide, with

 1/4 inch (6 mm) lip for poured concrete and steel pan applications, with EcoTread recycled rubber.

Nystrom Model: STSB-P1.875E-ECO, STSB-P3E-ECO, STSB-P4E-ECO

1) Attachment Method: [Cast-In, continuous extruded anchor] [Drilled Hole, Mechanically Fastened].

c. Long Nose Tread: **[1-7/8 inches (48 mm)] [3 inches (76 mm)]**  wide, with 1-1/8 inch (31 mm) lip with

 90 degree angle, with EcoTread recycled rubber.

Nystrom Model: STSB-L1.875E-ECO, STSB-L3E-ECO

1) Attachment Method: [Cast-In, continuous extruded anchor] [Drilled Hole, Mechanically

 Fastened].

d. Angled Long Nose Tread**: [1-7/8 inches (48 mm)] [3 inches (76 mm)]** wide, with 1-1/8 inch (31 mm)

 lip, 83 degree angle for sloped risers, with EcoTread recycled rubber.

Nystrom Model: STSB-A1.875E-ECO, STSB-A3E-ECO

1) Attachment Method: [Cast-In, continuous extruded anchor] [Drilled Hole, Mechanically Fastened].

e. Inset, Square Front and Back: [**1-3/8 inches** **(35 mm)**] [**3 inches** **(76 mm)**] with EcoTread recycled

 rubber. Nystrom Model: STSB-N1.375E-ECO, STSB-N3E-ECO

Attachment Method: [Cast-In, continuous extruded anchor] [Drilled Hole, Mechanically Fastened]

f. Renovation Long Nose Tread: **[5 inches (127 mm)] [9 inches (229 mm)] [11 inches (280 mm)]**

 wide, with 1-1/8 inch (31 mm) lip with 90 degree angle, with EcoTread recycled rubber.

Nystrom Model: STRB-L5D-ECO, STRB-L9D-ECO, STRB-L11D-ECO

1) Attachment Method: Drilled Hole, Mechanically Fastened.

g. Renovation Angled Nose Tread: **[5 inches (127 mm)] [9 inches (229 mm)] [11 inches (280 mm)]**

 wide, with 1-1/8 inch (31 mm) lip with 83 degree angle, with EcoTread recycled rubber.

Nystrom Model: STRB-A5D-ECO, STRB-A9D-ECO, STRB-A11D-ECO

1) Attachment Method: Drilled Hole, Mechanically Fastened.

Finish: 6063-T5 aluminum, mill finish.

EcoTread Colors: [Black] [Safety Yellow] [Black/Blue] [Black/Gray].

Specify taped top or stair nosing guard to prevent concrete from penetrating tread during installation. Painted

undersides create a barrier between metal and concrete to avoid adverse reaction.

Options

Taped Top.

Painted Undersides

Temporary Nosing Guard: Provide Short Tipped nosings with manufacturer's pre-installed heavy-duty, slip-resistant, removable nosing guard to provide protection of nosings during construction.

* + - * 1. Extruded Units: Aluminum, with EcoTread slip resistant, replaceable, recycled rubber combined with Photoluminescent insert.
1. Basis of Design Product: Nystrom, STSM-ECO, STTM-ECO, STRM-ECO
2. Nosing Types:

Ribbed Abrasive Short Tipped Nose: 3 inches (76 mm) wide EcoTread, 1 inch (25 mm) Photoluminescent **[53 mil Resin Strip] [21 mil abrasive grit]** and 2 inches (51 mm) EcoTread.Nystrom Model STSM-P3E-ECO

Attachment method: [Cast-In, continuous extruded anchor] [Drilled Hole, Mechanically Fastened].

Inset, Square Front and Back: 3 inches (76 mm), 1-inch (25 mm) Photoluminescent **[53 mil Resin Strip] [16 mil abrasive grit]** and 2 inches (51 mm) EcoTread**.**

Nystrom Model: STSM-N3E-ECO

Attachment Method: [Cast-In, continuous extruded anchor] [Drilled Hole, Mechanically Fastened].

Two-Part Short Tipped Nose Ribbed Bar Abrasive Nosing 3-3/8 inch (86 mm) wide EcoTread, 1 inch (25 mm) Photoluminescent **[53 mil Resin Strip] [21 mil abrasive grit]** and 2 3/8 inch (60.3mm) EcoTread. Nystrom Model: STTM-P3.375E-ECO

1. Attachment method: [Cast- In, continuous extruded anchor].

d. Renovation Long Nose Tread: **[5 inches (127 mm)]** wide EcoTread, with 1-1/8 inch (31 mm) lip with

 90 degree angle. Photoluminescent **[53 mil Resin Strip] [21 mil abrasive grit]** and 4 inches (102

 mm) EcoTread. Nystrom Model STRM-L5D-ECO, STRM-L5D-T-ECO

 1) Attachment Method: Drilled Hole, Mechanically Fastened.

e. Renovation Angled Nose Tread: **[5 inches (127 mm)]** wide, EcoTread, with 1-1/8 inch (31 mm) lip

 with 83 degree angle. Photoluminescent **[53 mil Resin Strip] [21 mil abrasive grit]** and 4 inches

 (102 mm) EcoTread. Nystrom Model STRM-A5D-ECO, STRM-A5D-T-ECO

1) Attachment Method: Drilled Hole, Mechanically Fastened.

Finish: 6063-T5 aluminum, mill finish.

EcoTread Colors: [Black] [Safety Yellow] [Black/Blue] [Black/Gray].

Specify taped top or stair nosing guard to prevent concrete from penetrating tread during installation. Painted undersides create a barrier between metal and concrete to avoid adverse reaction.

Options:

Taped Top.

Painted Undersides

Temporary Nosing Guard: Provide Short Tipped nosings with manufacturer's pre-installed heavy-duty, slip-resistant, removable nosing guard to provide protection of nosings during construction.

* + - 1. **Cast-Metal Units: Cast aluminum, with an integral-abrasive, as-cast finish consisting of aluminum oxide, silicon carbide, or a combination of both.**

Basis-of-Design Product: provide Nystrom; STCA

Provide cross-hatched units with silicon carbide abrasive 20 grit, a minimum of 2-1/4 ounces/sq. ft. (687 grams/sq. m), to a minimum of 1/32 inch (0.8 mm) thick.

Retain types required and revise to suit Project. Delete all three if configurations are indicated on Drawings.

Nosing Type:

Short Nose: Cross-hatched units, **[3 inches (76 mm)]** wide with 1/4-inch (6-mm) lip.

Attachment Method: [Anchor-In-Place] [Wing anchor].

Short Tipped Nose: Cross-hatched units, **[3 inches** **(76 mm)]**.

Attachment Method: [Anchor-In-Place] [Wing anchor].

Specify taped top to prevent concrete from penetrating tread during installation. Painted undersides create a barrier between metal and concrete to avoid adverse reaction.

Options:

Taped Top.

Painted Undersides.

1. EXECUTION
	* + 1. EXAMINATION
				1. Verify that preparation and affected dimensions are acceptable.
				2. Verify tolerances and correct improper conditions.
			2. PREPARATION
				1. Advise installers of details relating to floor hatch installation, including rough opening dimensions, locations of supports, and anchoring methods.
			3. INSTALLATION
				1. Follow manufacturer’s instructions for installing floor doors and hatches.
				2. Install frames plumb and level in opening, in proper alignment with floor surface for flush installation. Secure rigidly in place.
				3. Position units to provide convenient access to concealed Work requiring access.
			4. ADJUSTING
				1. Operational Units: Test-operate units with operable components.
				2. Clean and lubricate joints and hardware.
				3. Adjust for proper operation.
			5. CLEANing
				1. Clean adjacent surfaces and remove unused product and debris from site.
				2. Adjust doors for smooth operation.

END OF SECTION