**Specification Sheet** (2019)

**Part 1 General**

**1.1 System Description**

These specifications are for the TurfEdge™ Reducer Ramp products selected and dimensioned to provide the transition piece from existing flooring or changes to the substratum (Ramps modify existing changes in vertical rises). TurfEdge™ Reducer Ramps can be applied surfaces including but not limited to concrete, tile, VCT, marble, wood, asphalt, natural and synthetic fibers and painted surfaces.

**1.2 Quality Assurance**

A. Supplier Qualifications

1. Supplier of this Ramp product shall be SafePath™ Products by Van Duerr Industries, Inc., 21 Valley Court, Chico, CA 95973, PH# (530) 893-1596, (800) 497-2003, Fax (530) 893-1560, [www.SafePathProducts.com](http://www.SafePathProducts.com) or a registered supplier of Van Duerr Industries, Inc. or SafePath™ Products.

**Installer or Contractor Qualifications**

1. Installations will be performed by skilled tradesman experienced and trained in the flooring modifications and alterations.

**1.3 Reference Standards**

A. Manufacturer provides each ramp in accordance with the model descriptions and specifications established herein. All ramps shall be installed in accordance with all governing agencies with jurisdiction and in accordance with the Americans with Disabilities Act (ADA, 1990). TurfEdge™ Reducer Ramp products shall be in

compliance with the ADA and

Accessibility Guidelines (ADAAG) Sections 4.2.5 (Changes in Level) and 4.8.2 (Slope & Rise) of the Federal Register, 28 CFR, Part 36 and ANSI Standard A117.1. (1992), CABO and California Title 24, unless otherwise specified by the customer. All ramps and reducers shall exceed 8.33% maximum slope requirement.

**1.4 Performance**

A. TurfEdge™ Reducer Ramp products meet or exceed the following tests:

ASTM D 412 Tensile Elasticity 630psi

ASTM D395-82 Comp. Test 7.84%

ASTM D 2240 Hardness 65 (Shore A)

ASTM C 1026-84H20 Absorb. .75%

Density 1.01 grams/cm³

1) TurfEdge™ Reducer Ramp

products have no load weight limitations when properly installed according to manufacturer instructions.

B. TurfEdge™ Reducer Ramps exceeded all recognized standards utilizing three test methodologies for Static Coefficient of Friction (SCOF), Fixed-Angle Ramp-Walking, and Surface Roughness.

1) Static Coefficient of Friction (SCOF)

ASTM C 1028-96 (Dry- 0.95)

ASTM C 1028-96 (Wet- 0.79)

Static Coefficient of Friction values of 0.60 or higher are considered adequate for level floors in normal pedestrian traffic in commercial areas. Sliders used in testing were of Neolite synthetic rubber. Other materials used for SCOF included:

ASTM C 1028-96 Dry Leather (0.79)

ASTM C 1028-96 Wet -4 S rubber (0.82)

ASTM C 1028-96 Wet TRL rubber (0.95)

ASTM F609 Rubber 0.80

 2) Fixed Angle Walking

Utilizing two test subjects, one male and one female, facing a down slope

and an up slope at a flooring angle

of 27 degrees with wet running water. Angle of degree

corresponded to a SCOF of 0.50. Under normal walking conditions a SCOF of 0.40 (22 degrees) is a widely accepted minimum for walking tests of flooring for level surfaces. Testing angle appreciably exceeds the minimum safety criterion.

1. bare foot
2. Red Wing Iris athletic shoes
3. Converse 2D 1292 tennis shoes
4. Naturalizer 78ON73 wedge sandals

 3) Surface Roughness – surface total-mean peak-to-valley roughness, Rtm or RZ, measured by a Surtronic 10 profilometer was 25. Water-wet surface is low when the roughness exceeds 20 microns.

**1.5 Delivery, Storage and Handling**

A. Store products in accordance with the manufacturer’s instructions, with labels intact. TurfEdge™ Reducer Ramps shall be kept dry and away from sources of heat. Store on flat level surfaces.

**1.6 Project Conditions**

A. Review installation procedures and coordinate TurfEdge™ Reducer Ramp installation with other work.

B. Do not install on frozen materials or materials mixed or coated with ice or frost.

C. Surface must be dry and clean and free from dirt, oil, frost and all other foreign materials and have a minimum surface temperature of 35°F (3°C)

**Part 2 Products**

**2.1 Manufacturer**

A. TurfEdge™ Reducer Ramp products shall be manufactured by SafePath™ Products by Van Duerr Industries, Inc., 21 Valley Court, Chico, CA 95973, PH# (530) 893-1596, (800) 497-2003, Fax (530) 893-1560, [www.SafePathProducts.com](http://www.SafePathProducts.com)

**2.2 Materials**

A. TurfEdge™ Reducer Ramp material shall be made from 100% reclaimed 20 mesh minus crumb rubber with urethane binders by compression molding, and have a maximum hardness (Shore A) of 65 and comply with Americans with Disabilities Act (1990) ADAAG 4.2.5

B. Changes in level and ADAAG 4.8.2 Slope and Rise, UFAS Unit 4, Thresholds and ANSI Standards 117.1 (1986). Ramps shall have a 3/16” (6.35mm) front radius maintaining a slope of less than 1:12 to the top of the Ramp.

C. Ramp surfaces for models in 1150 through 2395 series shall have molded slip resistant traction pads 2” (50.8mm) by 3 3/8” (85.725mm) with 1/8” (3.175mm) depressed channel.

D. Ramp surfaces for models in Reducer 1400, 1200, 1000 & 900 series shall have molded slip resistant traction diamond design with equal and proportional spacing.

E. Ramps shall come in standard heights of single or multi piece construction in accordance with the model description and specifications established herein. Adhesive:

**WARNING: NEVER USE CONSTRUCTION ADHESIVE i.e. LIQUID NAILS™ OR OTHER**

**SIMILAR NON-APPROVED COMPOUNDS TO FASTEN RAMPS**

F. Securing ramp product to substratum. One part non-corrosive silicon adhesive sealant shall be one of the following products:

 1) SIKAFLEX 1A – One part Polyurethane, Elastomeric sealing/adhesive. Meeting Federal specifications TT-S-00230C, Type II, Class A. Meets c-920, Type S, Grade NS, use T, NT, O, M, G, I; Canadian standard CAN/CGSB 19.13-M87.

 2) SU 5007 RTV SILICONE ADHESIVE SEALANT. A supplied Silicones Unlimited Inc. located at 4577 Blakedale Circle, Roswell, GA 30075, PH# (770) 643-1880, or supplied by their authorized distributors. Silicone adhesive shall have Tensile Strength ASTM D-412 150 psi. UV Resistant, Curing time @ 77°F and 50% Relative Humidity (1/8” thickness) of 24 hour. Hardness (Shore A) 28.
Tack-Free time @ 77°F and 50% Relative Humidity, 20-30 minutes, and temperature range -80°F (62°C) to 400°F (205°C) or one part DOW CORNING 995 SILICONE STRUCTURAL ADHESIVE. Supplied by Dow Corning Corporation, Midland, MI 48686, PH# (517) 496-6000 or one of their authorized suppliers. Silicone adhesive shall have Tensile Strength ASTM D-412 350 psi. UV Resistant, Curing time @ 77°F and 50% Relative Humidity (1/8” thickness) of 24 hour. Hardness (Shore A) 28.
Tack-Free time @ 77°F and 50% Relative Humidity, 1.5 hours. Adhesive temperature range -65°F (-54°C) to 350°F (-65°C).

**2.3 Coating Materials**

SafePath™ Products’ StoneCap™ coating system:

1. StoneCap™ coating is a two-component, rapid-curing, hand-applied, non-solvent protective coat that can be trafficked within 4 hours of application at 68°F.

2. StoneCap™ is broadcast to rejection with the chosen dry skid resistant aggregate as approved by the manufacturer. This material is broadcast by manufacturer and applied to provide for even surface and 100% coverage of substrate material. Typically the DFT of the traffic coat including aggregate shall be 80 mils.

3. The StoneCap™ topcoat is a one-component, rapid-curing, clear, non-solvent polyurethane sealer which can be trafficked in 4 hours at 68°F.

4. StoneCap™ coating is applied by the manufacturer and completely cured prior to shipment of product.

**Part 3 Execution**

Ramps shall be installed in accordance with manufacturer’s instructions using ONLY recommended non-corrosive silicone adhesive sealants or mechanical fasteners.

**3.1 Preparation**

A. Surfaces must be dry, clean, and free from dirt, oil, frost, and all other foreign materials, and have a minimum surface temperature of 35°F (3°C). TurfEdge™ Reducer Ramps can be applied over expansion joints up to ½” (12mm) in width. In accordance with manufacturer’s guidelines, fill holes and cracks greater than ½” (12mm) in depth. Remove all bumps and foreign surfaces. Abrade highly polished and waxed surfaces.

B. Field verify all dimensions for vertical heights and path widths. Cut and modify ramps to meet specific installation requirements.

Ramp’s underside may be beveled, planed, or ground to accommodate minor inconsistencies in existing level surfaces.

C. Fit Ramp for size and application and then apply adhesive using heavy-duty hand or air dispensing gun and spread evenly with a notched trowel on the underside of ramp. Wait 5 minutes but no more than 15 minutes before applying ramp to substratum. Adhesive cures in 24 hours; foot traffic is permitted after 4 hours.

**Warranty**

SafePath™ Products and Van Duerr Industries, Inc. warrants that TurfEdge™ Reducer Ramp products will be free of any defect of material or workmanship for a period of (10) ten years from date of purchase. Coated surfaces are warranted against fading and peeling, and delaminating in interior applications for (1) one year from the date of purchase.

**Ordering**

Select proper size to accommodate the vertical height and width. For answers to your technical questions, call (530) 893-1596 or (800) 497-2003, or visit us at [www.SafePathProducts.com](http://www.SafePathProducts.com). For a quote or product application for your project, call your local authorized distributor. For current distributor listings and locations, visit our website. Product numbers and dimensions are also found at [www.SafePathProducts.com](http://www.SafePathProducts.com).

**Note**

This specification sheet is intended to assist you in preparing a precise specification. You may reproduce it in full or part. Specifications and dimensions are subject to state and

local building code changes. For additional technical code compliance information for your jurisdiction, contact **Van Duerr Industries, Inc. dba** **SafePath™ Products** at(530) 893-1596 or (800) 497-2003, by fax at (530) 893-1560 or by email at info@SafePathProducts.com

**Architectural Binders**

Architectural binders, complete with product specifications for all products manufactured by SafePath™ Products and Van Duerr Industries, Inc., are available upon request.

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**Series (R-SPC.vr.29)**