

## 0195P DTAC TACTILE INDICATORS AND STAIR EDGINGS

### Branded worksection

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### Worksection abstract

This branded worksection *Template* is applicable to the supply and installation of DTAC tactile indicators, edge protectors, and edging for stair nosings.

### Guidance text

All text within these boxes is provided as guidance for developing this worksection and should not form part of the final specification. This *Guidance* text may be hidden or deleted from the document using the NATSPEC Toolbar or the hidden text *Hide* and *Delete* functions of your word processing system. For additional information visit FAQs at [www.natspec.com.au](http://www.natspec.com.au).

### Optional style text

Text in this font (blue with a grey background) covers items specified less frequently. It is provided for incorporation into *Normal* style text where it is applicable to a project.

### Related material located elsewhere in NATSPEC

If a listed worksection is not part of your subscription package and you wish to purchase it, contact NATSPEC.

Related material may be found in other worksections. See for example:

- *0315 Concrete finishes* for concrete stairs and surface finishes.
- *0541 Access floors*.
- *0551 Joinery* for timber stairs.
- *0552 Metalwork – fabricated* for steel stairs.
- *0613 Terrazzo in situ* for surface finish.
- *0631 Ceramic tiling* for tiled floors and stairs.
- *0632 Stone and terrazzo tiling* for tiled floors and stairs.
- *0651 Resilient finishes* for stair and floor finish.
- *0652 Carpets* for stair and floor finish.
- *0654 Engineered panel flooring* for stair and floor finish.
- *0655 Timber flooring* for stair and floor finish.
- *0657 Resin based seamless flooring*.

### Documenting this and related work

You may document this and related work as follows:

- Locate tactile indicators, edge protectors and stair edgings on drawings.
- If using this worksection, remove tactile indicators from the other schedules as appropriate.

The *Normal* style text of this worksection may refer to items as being documented elsewhere in the contract documentation. Make sure they are documented.

Search [acumen.architecture.com.au](http://acumen.architecture.com.au), the Australian Institute of Architects' practice advisory subscription service, for notes on the following:

- Guarantees and warranties.

### Specifying ESD

DTAC manufacture a tactile indicator featuring a cupped underside, using less stainless steel and putting less demand on resources.

Refer to the NATSPEC TECHreport TR 01 on specifying ESD.

## 1 GENERAL

DTAC is an Australian company with over twelve years experience in design and manufacturing excellence, all backed by industry leading support. DTAC comprises a specialist team of professionals that prides itself on offering beautiful, BCA compliant, architectural tactile ground surface indicators and stair and joinery edging products. DTAC's range also includes

urban landscape edge protection and more. DTAC's unequalled attention to detail enables architects, designers and builders to make the right choice for aesthetic and functional conformance in every project.

## 1.1 RESPONSIBILITIES

### General

Requirement: Provide DTAC tactile indicators and edging, as documented.

*Documented is defined in the 0171 General requirements worksection as meaning contained in the contract documents.*

## 1.2 COMPANY CONTACTS

### DTAC technical contacts

Website: [www.dtac.com.au/contact](http://www.dtac.com.au/contact)

## 1.3 CROSS REFERENCES

### General

Requirement: Conform to the following:

- 0171 General requirements.

*0171 General requirements contains umbrella requirements for all building and services worksections.*

*List the worksections cross referenced by this worksection. 0171 General requirements references the 018 Common requirements subgroup of worksections. It is not necessary to repeat them here. However, you may also wish to direct the contractor to other worksections where there may be work that is closely associated with this work.*

*NATSPEC uses generic worksection titles, whether or not there are branded equivalents. If you use a branded worksection, change the cross reference here.*

## 1.4 STANDARDS

### General

Tactile indicators: To AS/NZS 1428.4.1.

*The BCA also cites AS 1428.4.1-1992.*

Stair edging: To AS 1428.1.

*The BCA also cites AS 1428.1-2001.*

### Slip resistance

Classification: To AS 4586.

*See NATSPEC TECHnote DES 001 on slip resistance.*

## 1.5 MANUFACTURER'S DOCUMENTS

### Technical manuals

Technical data sheets and laying guides: [www.dtac.com.au/resources](http://www.dtac.com.au/resources)

DTAC Stair & Tread Edging: [www.dtac.com.au/product/edging](http://www.dtac.com.au/product/edging)

DTAC Warning Tactile: [www.dtac.com.au/product/warning-tactile](http://www.dtac.com.au/product/warning-tactile)

DTAC Directional Tactile: [www.dtac.com.au/product/directional](http://www.dtac.com.au/product/directional)

DTAC Integrated Tactile: [www.dtac.com.au/product/integrated](http://www.dtac.com.au/product/integrated)

DTAC Edge Protector: [www.dtac.com.au/product/edge-protector](http://www.dtac.com.au/product/edge-protector)

## 1.6 SUBMISSIONS

### Products and materials

Type tests: Submit results, as follows:

- Slip resistance of tactile indicators and edgings.

*The DTAC range of tactile indicators and edging are tested to a range of slip resistance tests including AS 4586 Appendices A, C & D. Refer to the DTAC product Technical Data sheets for product specific test results.*

- Luminance contrast testing: Submit evidence of conformance to AS/NZS 1428.4.1 Appendix E and AS 1428.1 Appendix B.

*Product luminance test results are included on the DTAC technical data sheets which are presented by product type.*

### Prototypes

General: Provide a prototype of the DTAC product installed in the finished substrate.

Location and extent: [complete/delete]

Consider adding the following Optional text:

Incorporation: Subject to approval, incorporate the prototype in the completed works.

Preferably show the location and extent on the drawings. Delete if a prototype is not required.

### Warranties

Tactile indicators, edge protectors and stair edging: Submit DTAC product and installation warranties.

## 1.7 INSPECTION

### Notice

Inspection: Give notice so that inspection may be made of the completed substrate ready for tactile indicators and edging installation.

A site inspection can be conducted before installation.

Amend to suit the project, adding critical stage inspections required.

**Hold points**, if required, should be inserted here.

## 2 PRODUCTS

### 2.1 GENERAL

#### Product substitution

Other products: Conform to PRODUCTS, **GENERAL**, **Substitutions** in *0171 General requirements*.

The *0171 General requirements* worksection clause sets out the submissions required if the contractor proposes alternative products. Refer also to NATSPEC TECHnote GEN 006 for more information on proprietary specification.

### 2.2 DTAC TACTILE INDICATORS, EDGE PROTECTORS AND STAIR EDGING

DTAC can provide technical advice so that the appropriate tactile and edging products are specified.

#### Warning tactile products

Classic: Tactile indicators with a concentric circle design machined or injection moulded on the horizontal face and a smooth outer edge.

Available in type 316 stainless steel or solid brass, or in black, yellow or light grey UV stabilised thermoplastic urethane (TPU).

Terraced: Tactile indicators with a concentric circle design machined or injection moulded on the horizontal face and a terraced slip-resistant outer edge.

Available in type 316 stainless steel, solid brass, or type 316 stainless steel outer edge with a black UV stabilised thermoplastic urethane (TPU) top.

Classic Colourmax: Tactile indicators with a concentric circle design machined on the type 316 stainless steel horizontal face with a smooth injection moulded UV stabilised thermoplastic urethane (TPU) outer edge.

Available in black or yellow.

Handrail button: Machined domed type 316 stainless steel button.

Ecotac™ Classic: Tactile indicators with a cupped underside, a concentric circle design machined on the type 316 stainless steel horizontal face and a smooth outer edge.

Ecotac™ Terraced: Tactile indicators with a cupped underside, a concentric circle design machined on the type 316 stainless steel horizontal face and a terraced slip-resistant outer edge.

Ultimat™ Tactile Classic: UV stabilised thermoplastic urethane (TPU) injection moulded tactile with Classic tactile indicators on the horizontal face.

Available in black, yellow, light grey or ivory.

#### Directional tactile products

Ecotac™ Classic: Tactile indicator type 316 stainless steel with a cupped underside, a grooved design machined on the horizontal face and a smooth outer edge.

Ecotac™ Terraced: Tactile indicator type 316 stainless steel with a cupped underside, a grooved design machined on the horizontal face and a terraced slip-resistant outer edge.

Classic: UV stabilised thermoplastic urethane (TPU) injection moulded tactile with an undulating groove design on the horizontal face and a smooth outer edge.

Available in black, yellow or light grey.

### Integrated tactile products

Classic: Type 316 stainless steel plate with Classic tactile indicators integrated on the horizontal face.

Classic Black Top: Type 316 stainless steel plate with Classic Black tactile indicators integrated on the horizontal face.

### Edge protector

Round button: 35 mm diameter urban edge protector.

Available in type 316 stainless steel or solid brass.

Bevelled button: 35 mm diameter urban edge protector.

Available in type 316 stainless steel or solid brass.

Thin bar: 5 mm thick type 316 stainless steel bar.

Thick bar: 10 mm thick type 316 stainless steel bar.

### Stair edging products

Corduroy edging: Extruded aluminium sections with a continuous corduroy pattern.

Anodised finishes available include natural, black or gold. Sections available flat or angled.

Pinstripe edging: Extruded smooth, blunt edged aluminium sections with an intermittent high and low profile.

Anodised finishes available include natural or black, or a combination of both black and natural. Sections available flat or angled.

Pleat edging: Extruded smooth, aluminium sections with an intermittent continuous corduroy pattern.

Anodised finishes available include natural or black. Sections available flat or angled.

Stitch edging: Extruded aluminium sections with a continuous stitch pattern.

Anodised finishes available include natural or black, or a combination of both black and natural. Sections available flat or angled.

Suede edging: Extruded anodised aluminium sections with a continuous band of silicon carbide.

Available in, in either natural or black. Sections available flat or angled.

Urban edging: Continuous band of silicon carbide inserted into anodised aluminium extrusions.

Available in flat, angle or carpet profiles in natural or black anodised aluminium. Suitable for all stable finished outdoor or indoor surfaces and substrates.

Urban edging - Mill finished aluminium: Intermittent striations of silicon carbide inserted into aluminium extrusions.

Available in flat or angle profiles. Suitable for all stable finished outdoor or indoor surfaces and substrates.

Rugged™ edging: Continuous band of fibre glass reinforced plastic extrusion.

Available in angled profiles, in yellow or black.

Up to 40 µm thick, the DTAC hard anodising process produces a tough protective coating of aluminium oxide on the surface of the aluminium. This results in a uniform, hard wearing, scratch resistant surface ideal for commercial applications.

## 3 EXECUTION

### 3.1 GENERAL

#### Substrate preparation and installation of DTAC products

Requirement: To DTAC's recommendations and fitting instructions.

Location: As documented.

Classic, Terraced and Classic Colourmax:

- Stone, masonry, timber or vinyl substrates: Drill and pressure fit.

Vitrified porcelain, ceramics, glass or metal substrates: [complete/delete]

Select Diamond core/pressure fit or Direct stick from the options in the DTAC technical data sheet,

- Carpet or carpet tile substrates: Drill and screw.

Handrail button: Drill and glue to substrate.

Ultimat™ Tactile: Direct stick to substrate with DTAC anchor adhesive.

Button and bar urban edge protector:

- Stone, masonry, timber or vinyl substrates: Drill and glue.
- Vitrified porcelain, ceramics, glass or metal substrates: Diamond core drill and glue.

### Fixing stair edging

Corduroy, Pinstripe, Pleat, Stitch, Suede:

- Stone, masonry, timber or vinyl substrates: Adhesive fix.
- Vitrified porcelain, ceramics, glass or metal substrates: Adhesive fix.
- Carpet or carpet tile substrates: Screw-fix or adhesive fix.

Urban and Rugged™: Screw-fix with optional adhesive.

## 3.2 TESTING

### Completion tests

Slip resistance of completed installation: To AS 4663.

Delete if not required. See NATSPEC TECHnote DES 001. The wet-barefoot inclining platform test and the oil-wet inclining platform test cannot be performed in situ.

Luminance contrast testing of completed installation: Submit evidence of conformance to AS/NZS 1428.4.1 Appendix E and AS 1428.1 Appendix B.

DTAC can test substrates for luminance contrast to make sure the installed DTAC tactile indicators and edging conform to AS/NZS 1428.4.1 Appendix E for tactile indicators and AS 1428.1 Appendix B for edging. Delete if not required.

## 3.3 COMPLETION

### Warranties

Conditions: Installation by DTAC or DTAC approved by installer.

Warranty period: 2 years.

The DTAC range of tactile indicators and edging are guaranteed for 2 years against defects in materials and workmanship, provided the products are fitted and inspected in accordance with the manufacturer's specifications.

## 4 SELECTIONS

**Schedules** are a way of documenting a selection of proprietary or generic products or systems by their properties. Indicate their locations here and/or on the drawings. Refer to NATSPEC TECHnote GEN 024 for guidance on using and editing schedules.

### 4.1 DTAC PRODUCTS

#### Tactile indicator and edge protector schedule

Property	TI1	TI2	TI3
Type			
Product code			
Design			
Material/Colour			
Slip-resistance classification			
Substrate			

TI1, TI2, TI3: These designate each instance or type or location of the item schedule. Edit to align with the project's codes or tags.

Edit codes in the **Schedule** to match those on drawings.

Type: Select from Warning tactile, Directional tactile, Integrated tactile or Urban edge protector.

Product code: Refer to the DTAC technical data sheets.

Design: Select from:

- Warning tactile indicator: Classic, Terraced, Classic Colourmax or Handrail button.

- Directional tactile indicator: Ecotac™ Classic, Ecotac™ Terraced or Ultimat™ Tactile Classic.
- Integrated tactile indicator: Classic or Classic Black Top.
- Edge protector: Button bevelled, Button round, Bar thin or Bar thick.

Material/Colour: A colour contrast may be required, in both wet and dry conditions, between the tactile indicators and the adjacent surface. The colour is to provide a luminance contrast to the surrounding surface to AS/NZS 1428.4.1 Appendix E.

Material/Colour of warning tactile indicators: Select from:

- Classic: Stainless steel, Brass, or Black, Yellow or Light grey urethane.
- Terraced: Stainless steel, Brass, or Stainless steel outer edge with a black urethane top.
- Classic Colourmax: Black or Yellow.
- Handrail button: Stainless steel.
- Ecotac™ Classic: Stainless steel.
- Ecotac™ Terraced: Stainless steel.
- Ultimat™ Tactile Classic: Black, Yellow, Light grey or Ivory urethane.

Material/Colour of integrated tactile products: Select from:

- Classic: Stainless steel.
- Classic Black Top: Stainless steel with black tactile.

Material/Colour of edge protector: Select from:

- Button: Stainless steel or Brass.
- Bar: Stainless steel.

Slip resistance classification: Refer to NATSPEC TECHnote DES 001, SA HB 197 and SA HB 198. Select the slip resistance test and classification to suit the location and application.

Substrate: Nominate the material of the substrate for fixing the tactile indicator.

### Stair edging schedule

Property	SE1	SE2	SE3
Product code			
Application			
Design			
Colour			
Slip-resistance classification			
Substrate			

SE1, SE2, SE3: These designate each instance or type or location of the item schedule. Edit to align with the project's codes or tags.

Edit codes in the **Schedule** to match those on drawings.

Product code: Refer to the DTAC technical data sheets.

Application: e.g. Stair nosing to BCA requirements, or Edging to finishes as detailed.

Design: Select from:

- Corduroy.
- Pinstripe.
- Pleat.
- Stitch.
- Suede.
- Urban.
- Urban - Mill finished aluminium.
- Rugged™.

Colour: Select from:

- Corduroy edging: Natural, Black or Gold.
- Pinstripe edging: Natural, Black, or Black brushed.

- Pleat edging: Natural or Black.
- Stitch edging: Natural, Black, or Black and natural.
- Suede edging: Natural or Black.
- Urban edging: Natural or Black anodised aluminium.
- Rugged™ edging: Yellow or Black.

Slip resistance classification: Refer to NATSPEC TECHnote DES 001, SA HB 197 and SA HB 198. Select the slip resistance test and classification to suit the location and application.

Substrate: Nominate the material of the substrate for fixing the stair edging.

#### REFERENCED DOCUMENTS

The following documents are incorporated into this worksection by reference:

AS 1428		Design for access and mobility
AS 1428.1	2009	General requirements for access - New building work
AS/NZS 1428.4.1	2009	Means to assist the orientation of people with vision impairment - Tactile ground surface indicators
AS 4586	2013	Slip resistance classification of new pedestrian surface materials
AS 4663	2013	Slip resistance measurement of existing pedestrian surfaces

The following documents are mentioned only in the *Guidance text*:

AS 1428.4.1	2009	Tactile ground surface indicators for the orientation of people with vision impairment
AS 1428		Design for access and mobility
AS 1428.1	2001	General requirements for access - New building work
SA HB 197	1999	An introductory guide to the slip resistance of pedestrian surface materials
SA HB 198	2014	Guide to the specification and testing of slip resistance of pedestrian surfaces
NATSPEC DES 001	2016	Slip resistance performance
NATSPEC GEN 006	2007	Product specifying and substitution
NATSPEC GEN 024	2015	Using NATSPEC selections schedules
NATSPEC TR 01	2018	Specifying ESD