August 2019

6

Uniclass Pr\_35\_90\_31 Pr\_35\_90\_43\_02 / 59 / 64 Cl/SfB \_\_\_\_ (43) + (44) \_\_\_ X

# Stair Edgings & Floor Trims

Accessories | the widest choice of solutions

# GRADUS

# GRADUS

Our products are installed in prestigious buildings in both UK and International markets. With customers ranging from designers & architects to contractors and building owners and with clients such as Marks & Spencer, Virgin and BMW you can trust Gradus to provide products that work.





Hong Kong International Airport



Marina Bay Sands Resort, Singapore



Royal Caribbean Cruise Ship



Burj Al Arab, Dubai, UAE



The Christie, Manchester, England



Eiffel Tower, Paris, France

### Contents

NEW	Product Update	2 - 3
Why Gradus		4 - 6
Section 1	Stair Edgings & Complementary Trims	9
	Guide to Stair Edgings	10 - 15
	Stair Edging Colour Availability	16 - 19
	Aluminium	20 - 31
	Trans-Edge - Heavy-duty Stair Edgings	32 - 33
	Trans-Edge - Heavy-duty Stair & Floor System	34 - 35
	Chrome & Bronze	36 - 39
	PVC-u Hardnose	40 - 45
	Flexible pvc	46 - 47
	Illuminated Stair Edgings	48 - 51
	Guide to Stair Trims & Welded Corners	52 - 59
Section 2	Transition Strips	61
	Transition Strip Colour Availability	62 - 63
	Luxury Trim System	64 - 66
	MTS Multi-Trim System	67 - 69
	Clip-Top	70 - 72
	Clip-Top fx	73 - 75
	Design Clip	76 - 77
	PPS System	78 - 79
	Euro-Clip System	80 - 81
	Trans-Edge - Heavy-duty Trims	82 - 83
	Matwell Frames	84 - 85
	Specialist Floor Trims	86 - 117
Section 3	Skirtings, Capping Strips & Accessories	119
	Guide to Skirtings	120
	Skirting Colour Availability	121
	Stratum Skirtings	122 - 123
	Pvc Skirtings	124 - 127
	Capping Strips & Cove Formers	128 - 130
	Metal Skirtings	131 - 133
Section 4	Associated Products for Stairs & Floors	135
	Stairtile - Slip-Resistant Flooring	136 - 137
	Cable Ducts - Cable Management	138 - 139
	Safety Track - Slip-Resistant Finish	140
Section 5	Appendix	141
	The Gradus Guarantee	142
	Testing	143
	Cleaning & Maintenance	143
	Specification Guidelines	144 - 155
Index	Full product index	156 - 157

### **NEW Product Update**



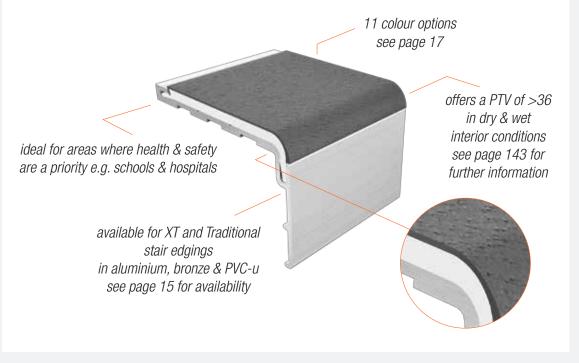
### The Ultimate Stair Edging

**NEW** XT aluminium retains all the existing benefits of XT with the addition of new features that offer improved performance including use in areas where more intensive cleaning is required e.g. healthcare & education applications.

New insert offers improved performance extended insert design provides maximum safety underfoot New unique mechanical locking mechanism secures insert in place recess to accommodate floorcovering ensures secure fit of profile to step backing points help to ideal for use with Gradus Grip hold floorcovering in place ultra strong stair edging adhesive eliminates the need for mechanical fixings and screw head cover plugs see page 13 for details Aluminium XT Stair Edgings see pages 21-22

### Xtra-grip & Xtra-grip Plus stair edging insert

**NEW** improved Xtra-grip provides increased surface roughness for use in areas where the stair edgings may become wet e.g. stairs close to entrances or where safety flooring is used.



### Floor Trims

**NEW** additions to the floor trims range including trims for use with luxury vinyl tiles (LVT)

Multi-Purpose Trims see page 96, 97, 100

*Cove Formers see page 104* 

Square Edge Trim see page 112

# Why Gradus

Gradus is the market leader in contract flooring accessories and offers the widest choice in product solutions for stairs and floors.

All our products are designed to ensure the correct balance between safety, performance and aesthetics and are suitable for a wide variety of contract applications.





# Services

### The Gradus Knowledge:

**CPD** - Gradus offers comprehensive RIBA assessed CPD seminars covering specification, legislation, safety, performance and aesthetics.

**Seminar** - An informal opportunity for Gradus to bring an exhibition of products directly to you. Flexible and informative, they can be arranged at a date and time to suit you. See page 153 for more information.

### **Measuring Service**

Take the hassle out of the job and let Gradus provide accurate stair edging measures, saving you time and money.

### Website

Visit www.gradus.com to access all of our products and services.

### **Fabrications**

When projects aren't straightforward, we can help customise many of our products to ensure a solution that fits.

### Samples

Call Gradus or build a design board online and get all the samples you need within 24 hours.

### Tel: 01625 428922 or email: imail@gradus.com

### Quality



- 10 year warranty against material and manufacturing defects under normal use and service, subject to materials being installed and maintained to our recommendations. Look out for products that carry the 10 year warranty
- ISO 9001 Quality Management accredited company
- OHSAS 18001 Occupational Health & Safety

### Design

- Safety: products are developed with safety at the forefront of design. All stair edgings and floor trims effectively contribute to a reduction in slip and trip accidents
- Performance: extensive research and testing to ensure durability and appearance retention throughout a product's life
- Aesthetics: a variety of colours and finishes ensure harmonisation with interior designs and allow visual contrast to be achieved where relevant
- In-house product design and development

### **Sustainability**

- ISO 14001 Environmental Management accredited company
- Our pledge is 'To meet our present business needs without compromising our long term future'
- We have a firm set of environmental objectives allowing us to focus on raw material selection, legislation, waste reduction, training and recycling

### REACH



- REACH (Registration, Evaluation, Authorisation and restriction of CHemicals) and Substances of Very High Concern (SVHC) is the system for controlling chemicals in Europe. It became law in the UK on 1<sup>st</sup> June 2007
- Gradus products do not contain any substances currently classified as Substances of Very High Concern (SVHC) at a concentration greater than 0.1% appearing on the Candidate List in accordance with Article 59 (10) of the REACH Regulation (EC) 1907/2006
- Gradus products do not contain any known potentially harmful substances such as formaldehyde or heavy metals such as lead, cadmium or mercury

### Knowledge

- Member of the Contract Flooring Association (CFA)
- Registered member of the RIBA CPD Providers Network
- Technical Support
- Member of NBS Plus
- Network of trained specification consultants



let's take a walk so we can falk about Liverpool the daughter of Merseyside We can take a trip around the Albert Docks then see the LIVERBIRDS and the LIVERCLOCKS sell the ferry across the River Mersey from the contections, the poems, the accent from the contections, the poems, the accent ond the sounds of the MeRSEYBEAT them the contections, the poems, the accent them the sounds of the MeRSEYBEAT sectors in the accent of the terry a literary scouse, treasure

8 🧐

1.

200-

# Section 1

### Stair Edgings & Complementary Trims

Providing the most extensive range in the UK, Gradus stair edgings can help to reduce accidents on stairs as well as helping to provide an inclusive environment giving access to all building users.

# Why use a stair edging?

### Reduce accidents on stairs by:

Providing slip-resistance at the edge of the step Providing a visual contrast to highlight the edge of the step



- Reduce maintenance costs
- Improve the aesthetics of a building

### Comply with the guidance in

Approved Documents K and M of The Building Regulations 2010, BS 8300-2:2018, BS 9266:2013 and BS 5395-1:2010 in line with the Equality Act 2010



## Follow our 3 step guide to selecting the correct stair edging, see pages 11 to 15

### Step 1

### Choose the right stair edging and fixing method for the step

### **Specification Guidelines**

BS 8300-2:2018 refers to research undertaken by BRE. This research shows that if the depth of the tread is less than 300mm the risk of an overstep is increased. A stair nosing that **wraps around the riser** will reduce this risk by increasing the slip-resistance at the step edge.

Don't take the risk!

Gradus stair nosings offer a wide range of profiles that satisfy all the latest building standards and guidelines and accommodate a wide range of floorcoverings.

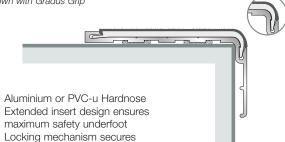
### Types of Stair Nosing

### XT range



insert in place

screw head cover plugs Mechanical lock for insert



Traditional range
Shown with mechanical fixing
Aluminium, Chrome, Bronze or PVC-u Hardnose
Factory bonded inserts supplied





## Step 1 continued

### Shape of Step

Select the correct stair nosing for the shape of the step – this should be a tight fit to the step to ensure that the profile does not lift or rock during use. There are four main stair nosing shapes to choose from (see below). Kinked face profiles can be used on square and some rake back stairs.

# Square Rake Back Kinked Face

Bullnose

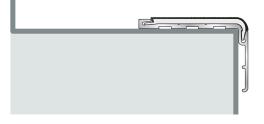
### Tread (going)

The depth of the tread (going) will also have an influence on the stair nosing selected. A study conducted by BRE found that slips on stairs are often as a result of an overstep, especially on narrow treads (less than 300mm). To help reduce the risk of slips in an overstep situation, the XT stair nosing range incorporates a slip-resistant insert that extends around the leading edge of the profile in line with BRE recommendations.

Gradus offers a wide range of profiles to suit different tread sizes:

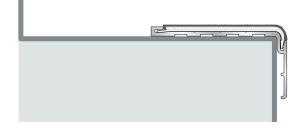
### Single Channel

• Single channel – ideal for use on treads up to 300mm deep



### Wide, Double & Multiple Channel

- Wide, double and multiple channels suitable for stairs with a large going, especially if they are subject to heavy volumes of foot traffic e.g. railway stations, supermarkets, department stores, secondary and further education establishments and major hospitals.
- When specifying double channel stair edgings, both inserts should be of the same colour and be of a contrasting colour to the surrounding floor finish.
- When specifying multiple channel stair edgings the front insert should always be in a visually contrasting colour to the remaining inserts to ensure definition of the step edge. The remaining inserts must always be of the same colour and ideally match the surrounding floorcovering.



### Gauge …

The gauge (thickness) of the stair nosing should be a flush finish to the floorcovering to avoid a trip hazard being created. When used with soft floorcoverings such as carpet and carpet tile, the gauge should achieve a flush finish with the compressed thickness of the floorcovering.

Gradus offers a range of gauges to suit the majority of commercial floorcoverings (see below).

Gauge	Typically used with						
Ramp back	No floorcoverings / Resilient floorcoverings - install profile on top of the floorcovering to ensure a safe fit						
2mm – 3mm	silient floorcoverings						
4mm – 5mm	Carpet / Carpet Tile / Resilient floorcoverings with a bevelled underlay (see page 56) in heavy use areas						
6mm	Carpet / Carpet Tile						
7mm – 10mm	Carpet / Wood / Ceramics / Other heavy duty floorcoverings						
10mm – 15mm	Ceramics / Stone / Marble						

### Fixing Method

A secure fixing between the stair edging and the step is essential to ensuring a safe installation. The stair edging profile, type and condition of the substrate and the application will affect the type of fixing method required.

### Adhesive only fixing - Gradus Grip

A specialist adhesive designed to securely bond stair edgings, eliminating the need for screws and screw head cover plugs, providing a neater finish. The Gradus Grip adhesive bond is available with a 10 year warranty.

### Mechanical and adhesive fixing

A combination of screw fixings, cartridge adhesive and screw head cover plugs are used to achieve a secure fixing.

To ensure the correct installation method is selected further information can be found in our installation instructions available at www.gradus.com

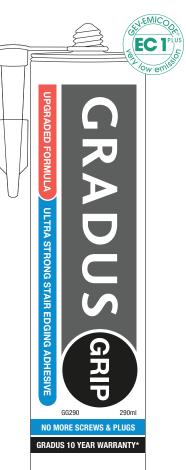


### UPGRADED FORMULA ULTRA STRONG STAIR EDGING ADHESIVE

### Save time

- Save money
- Gradus 10 year warranty
- Rapid curing
- No more screws & plugs
- Ultra strong bond
   Download the NBS at www.gradus.com

Have you tried it yet?



### Step 2

# Select the correct slip-resistance for the conditions



### **Specification Guidelines**

BS 8300-2:2018, BS 5395-1:2010 and BS 9266:2013 refers to the slip-resistance of surface finishes on stairs. A pendulum test is used to assess slip-resistance and a Pendulum Test Value (PTV) of greater than 36 is required in both dry conditions and also when the stairs are at risk of becoming wet through walked in moisture and spillages.

### Slip-resistance & Performance



An insert provides a surface that creates friction between the sole of the shoe and the step edge, hence providing slip-resistance and reducing the risk of slips on stairs. All Gradus inserts are tested for slip-resistance – see results on page 143.

Ensure the required level of slip-resistance is achieved to reduce the risk of slips and falls on stairs by **selecting the correct insert for the environment**:

- Interior installations not always dry conditions. Consider whether there is a risk of the stair nosing becoming wet and select the correct insert accordingly.
- Safety flooring select an insert that matches or improves the slip-resistant qualities of the flooring.

Insert Type	pe Conditions Applications		Material	Stair Edgings		
NEW         Interior Wet         may becom           Xtra-grip         Interior Dry         Areas where		Increased surface roughness where the stair edging may become wet e.g. stairs close to entrances or where safety flooring is used. Areas where health and safety are a priority e.g. schools and hospitals.	Pvc with mineral aggregate.	XT (pages 21-22, 41-42) Traditional (pages 25-31, 37-39, 43-45)		
NEW Xtra-grip Plus	Interior Wet Interior Dry	As Xtra-grip, with the addition of an enhanced insert bond system for areas subject to more frequent cleaning e.g. catering and food preparation areas.	Pvc with mineral aggregate.	XT (pages 41-42) Traditional (pages 25-31, 37-39, 43-45)		
Interior	rior Interior Dry Areas where there is no risk that the stairs will be contaminated by moisture.		Pvc with mineral inclusion - standard or grained surface.	XT (pages 21-22, 41-42) Elite (pages 23-24, 38) Traditional (pages 25-31, 37-39, 43-45)		
Standard Exterior	Exterior		Glass reinforced polyester with fused alumina.	Traditional (pages 25-31, 37-39, 43-45)		
Heavy Duty Exterior	Interior environments e.d. motorway tool priddes, railway		Glass reinforced polyester with fused alumina (TEX).	TEX range (page 33)		

### Step 3

# Choose a colour that visually contrasts

### **Specification Guidelines**

BS 8300-2:2018, BS 5395-1:2010, BS 9266:2013 & Approved Documents M (ADM) & K (ADK) of The Building Regulations 2010 highlight the need to ensure there is sufficient visual contrast at the step edge, providing a safe environment for all building users.

Project Rainbow and ADM recommend that there is at least a 30 point difference between the LRVs of the stair nosing and floorcovering to achieve a suitable contrast.

### Visual Contrast

All Gradus stair nosing channel and insert colours are measured for LRVs in accordance with BS 8493:2008+A1:2010 to help achieve this difference. Gradus PVC-u Hardnose stair nosings can be selected with the channel and insert in the same colour to provide the ideal solution for creating visual contrast (picture 1), in line with Approved Documents M & K, BS 8300-2:2018, BS 5395-1:2010 and BS 9266:2013 guidelines.



**Good Visual Contrast** Installed with Gradus Stair Nosings picture 1



**Poor Visual Contrast** No Stair Nosings – Don't Take the Risk

### Tonal Contrast

It is important to achieve a tonal contrast between the floorcovering and the stair nosing as people with visual impairments may not be able to see some or all colours but can perceive light and dark. The photographs below show that colour contrast (picture 1) visible to fully-sighted people may not always offer a tonal contrast (picture 2) for partially-sighted people.



**Fully-sighted People** Tonal Contrast picture 1



Partially-sighted People Poor Tonal Contrast picture 2

### **Stair Edging Colours**



The range of stair edging colours from Gradus provides a comprehensive solution allowing specifiers and users to achieve visual contrast in line with recommendations in The Building Regulations 2010 - Approved Documents K & M, BS 8300-2:2018, BS 9266:2013 & BS 5395-1:2010 and BRE IP15/03 (see pages 146-152).

The colours have been developed to provide a wide choice of visual contrast with matching colours for both insert and Hardnose channel. All colours have been measured for light reflectance/visual contrast (LRV using the CIE Y value).

For guidance on selecting matching channel and insert colours that provide visual contrast on both the tread and riser, see pages 144-146. For channel and insert availability by range see individual profile pages.

Please note: Due to the limitations of the printing process, colours within this catalogue should not be relied upon for colour matching. An accurate colour match can only be achieved by requesting the relevant product sample(s) from Gradus Technical Support on 01625 428922.

NCS Colour References



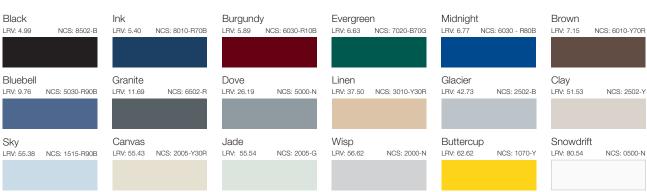
Gradus is a member of NCS (Natural Colour System) and utilises the NCS reference codes shown above each colour. For further information visit www.ncscolour.co.uk

©Property of and used under licence from the Scandinavian Colour Institute AB, SCI-Sweden se, Stockholm 2004. 'See www.ncscolour.co.uk for NCS-standard samples'.

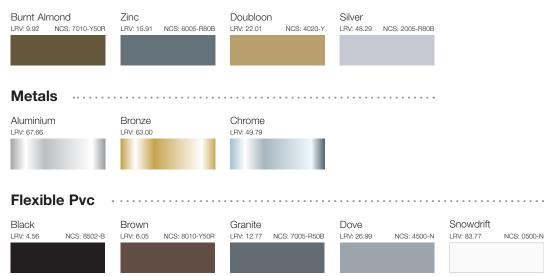
### **Channel Colours**

Note: Not all colours are available for all profiles. See individual profile pages for colour availability or refer to the chart on page 19.

### PVC-u Hardnose<sup>™</sup> Satin Finish

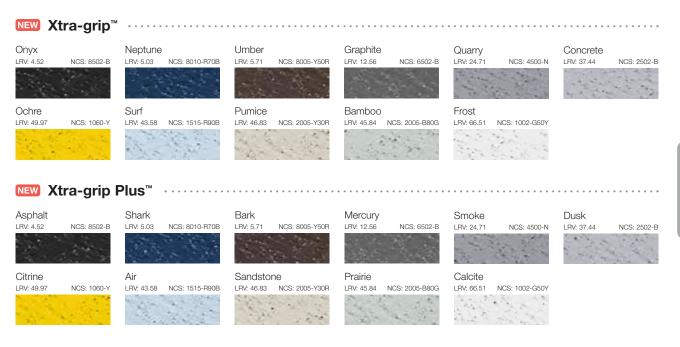


### PVC-u Hardnose<sup>™</sup> Metallic Finish



### **Insert Colours**

Note: Not all colours are available for all profiles. See individual profile pages for colour availability or refer to the chart on page 19.



### Interior Standard Finish

Jet	Ink	Burgundy	Coffee	Midnight	Evergreen
LRV: 4.56 NCS: 8502-B	LRV: 4.96 NCS: 8010-R70B	LRV: 5.70 NCS: 6030-R10B	LRV: 6.05 NCS: 8010-Y50R	LRV: 6.56 NCS: 6030-R80B	LRV: 6.69 NCS: 7020-B70G
Ocean	Poppy	Lead	Steel	Cloud	Linen
LRV: 8.00 NCS: 6020-R90B	LRV: 10.39 NCS: 2070-R	LRV: 12.77 NCS: 7005-R50B	LRV: 26.99 NCS: 4500-N	LRV: 28.57 NCS: 4010-R70B	LRV: 38.59 NCS: 3010-Y30R
Glacier	Clay	Sky	Canvas	Jade	Buttercup
LRV: 42.09 NCS: 2502-B	LRV: 47.97 NCS: 2502-Y	LRV: 52.63 NCS: 1515-R90B	LRV: 53.27 NCS: 2005-Y30R	LRV: 53.98 NCS: 2005-G	LRV: 55.54 NCS: 1070-Y
Photoluminescent LRV: 57.59 - lit conditions	Wisp LRV: 58.17 NCS: 2000-N	Snowdrift LRV: 83.77 NCS: 0500-N			
Interior Graine	d Finish ······				
Black LRV: 6.47 NCS: 7502-B	Brown LRV: 12.13 NCS: 6010-Y70R	Granite LRV: 13.44 NCS: 6502-R	Dove LRV: 23.40 NCS: 5000-N		

### Standard Exterior







. . . . . . . . . . . .



. . . . . . . . . . . . . . .

#### Note: Standard Exterior available in cut lengths only up to 2.75m. Factory bonded insert with visible fixings (no cover plugs). Not available curved.

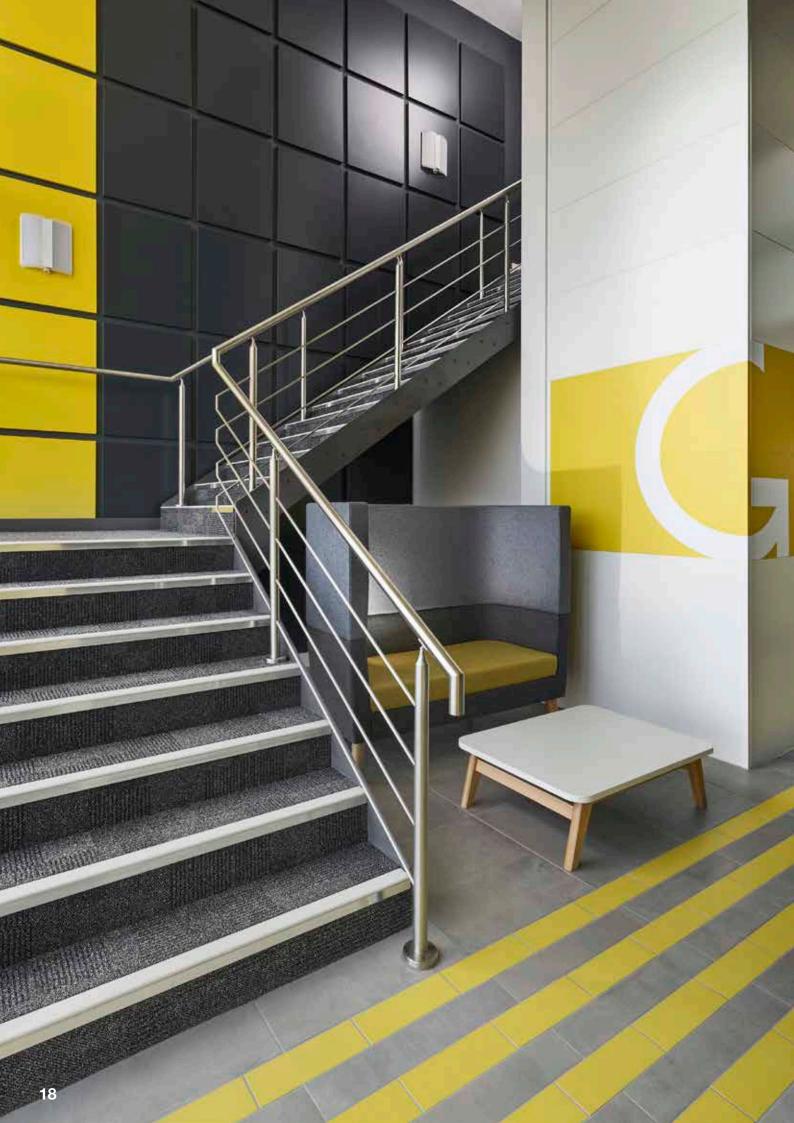
### Heavy Duty Exterior

Charcoal LRV: 4.07



Ash LRV: 24.77 Avalanche LRV: 73.00

### 17



### **Stair Edging Colour Availability**

	ey: • Available find the pages 16-17 for land	r <b>om stock</b> rger colour swatches	PVC-u Hardnose XT pages 41-42	PVC-u Hardnose RN page 44	PVC-u Hardnose DDA page 43	PVC-u Hardnose RNRC page 43	PVC-u Hardnose MR page 45	Auminium XT pages 21-22	Auminium CXT page 22	Auminium Elite pages 23-24	Auminium Traditional pages 25-31	Auminium Trans-Edge TEX page 33	Chrome page 37	Bronze Elite page 38	Bronze Traditional page 38-39	Lighting Profiles page 50-51
INSERT	Interior Standard	Jet Ink Midnight Burgundy Evergreen Coffee Ocean Lead Cloud Steel Linen Glacier Canvas Buttercup Snowdrift Poppy Clay Jade Sky Wisp Photoluminescent														
	Interior Grained	Black Brown Granite Dove		•	•	•	•	• **	• **		•		•		•	
	NEW Xtra-grip & Xtra-grip Plus	<ul> <li>Onyx / Asphalt</li> <li>Neptune / Shark</li> <li>Umber / Bark</li> <li>Graphite / Mercury</li> <li>Quarry / Smoke</li> <li>Concrete / Dusk</li> <li>Ochre / Citrine</li> <li>Surf / Air</li> <li>Pumice / Sandstone</li> <li>Bamboo / Prairie</li> <li>Frost / Calcite</li> </ul>	• • • • • • • • • • • •					<ul> <li>**</li> </ul>	<ul> <li>**</li> </ul>							• • • • • • • • • • • • •
	Standard Exterior	Tornado Sandstorm Hurricane Blizzard Charcoal									•	•			•	
	Heavy Duty Exterior	Ash Firestorm Avalanche										•				
CHANNEL	Hardnose	<ul> <li>Bluebell</li> <li>Black</li> <li>Brown</li> <li>Granite</li> <li>Dove</li> <li>Ink</li> <li>Midnight</li> <li>Burgundy</li> <li>Evergreen</li> <li>Linen</li> <li>Glacier</li> <li>Canvas</li> <li>Buttercup</li> <li>Snowdrift</li> <li>Clay</li> <li>Jade</li> <li>Sky</li> <li>Wisp</li> <li>Dot Almond</li> </ul>				•	(		🔛 ins	sert colo	ours tha	t provid		contra	annel an st on bc	
	Metallic Hardnose	<ul> <li>Burnt Almond</li> <li>Zinc</li> <li>Doubloon</li> <li>Silver</li> </ul>					•									

\* AS19, G65, BGR121 are not available with Photoluminescent insert. \*\* Available with Xtra-grip only.

### **Aluminium - Stair Edgings**



An extensive range of attractive and hardwearing stair edgings comprising aluminium channels with a choice of slip-resistant inserts. Used in conjunction with floorcoverings from all major manufacturers. Suitable for all commercial and most industrial applications.

### **Choice of Profile:**

- XT range
- Elite range
- Traditional range

### Information:

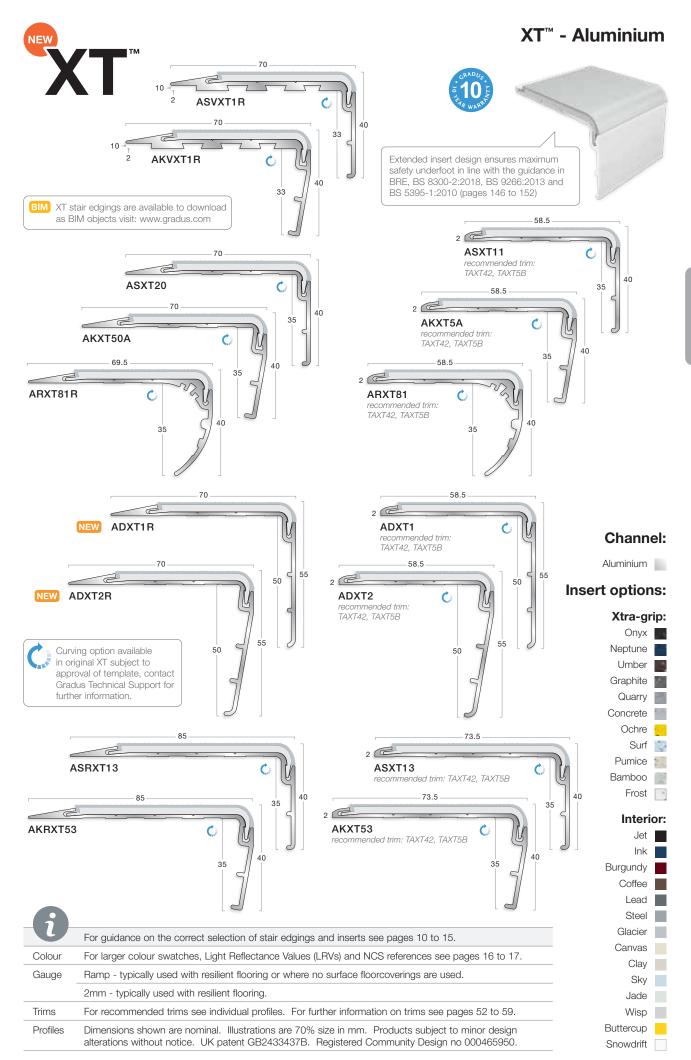
- For guidance on the correct selection of stair edgings see pages 10 to 15.
- For larger colour swatches, Light Reflectance Values (LRVs) and NCS references see pages 16 to 17.

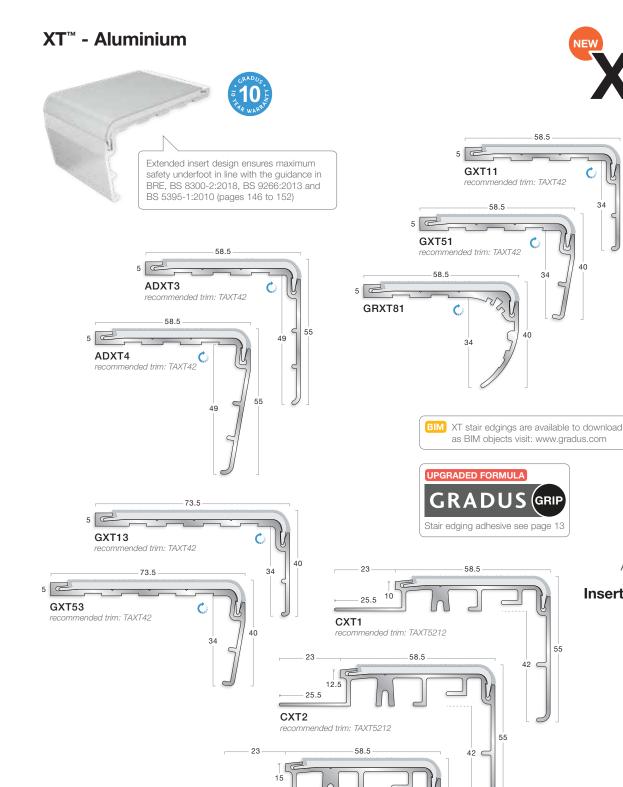


Profile can be curved subject to approval of template - contact Gradus Technical Support for further information.



Visit: www.gradus.com to download: AutoCAD drawings, Gradus & NBS Specifications, Cleaning & Maintenance, Installation Guidelines and Health & Safety Data Sheets.





25.5

recommended trim: TAXT523

For guidance on the correct selection of stair edgings and inserts see pages 10 to 15.

For larger colour swatches, Light Reflectance Values (LRVs) and NCS references see pages 16 to 17.

For recommended trims see individual profiles. For further information on trims see pages 52 to 59.

Dimensions shown are nominal. Illustrations are 70% size in mm. Products subject to minor design

alterations without notice. UK patent GB2433437B. Registered Community Design no 000465950 and

55

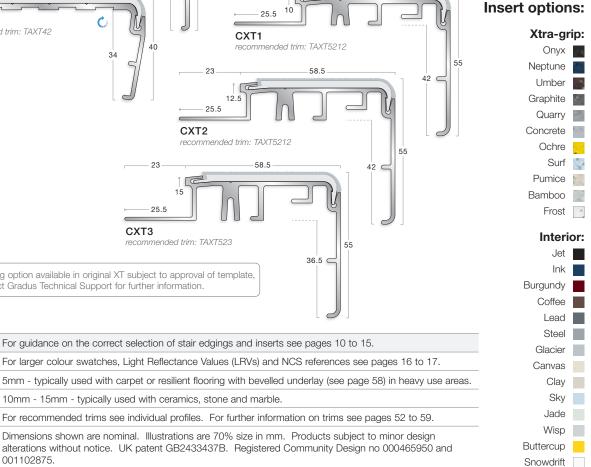
36.5

CXT3

10mm - 15mm - typically used with ceramics, stone and marble.

Curving option available in original XT subject to approval of template,

contact Gradus Technical Support for further information.



Channel:

Aluminium

NFW

40

40

Colour

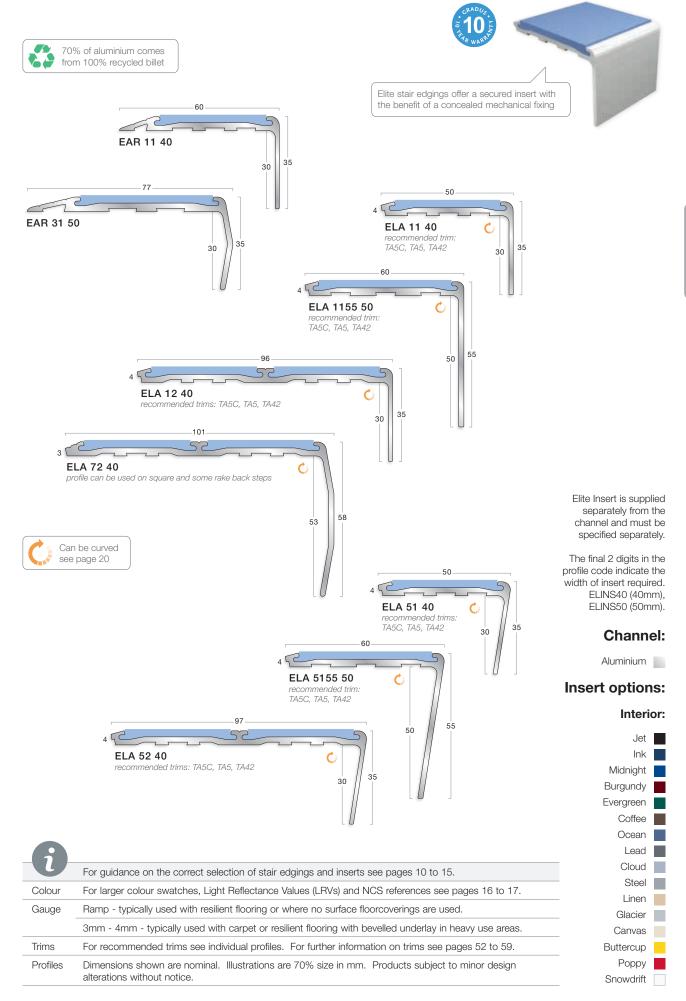
Gauge

Trims

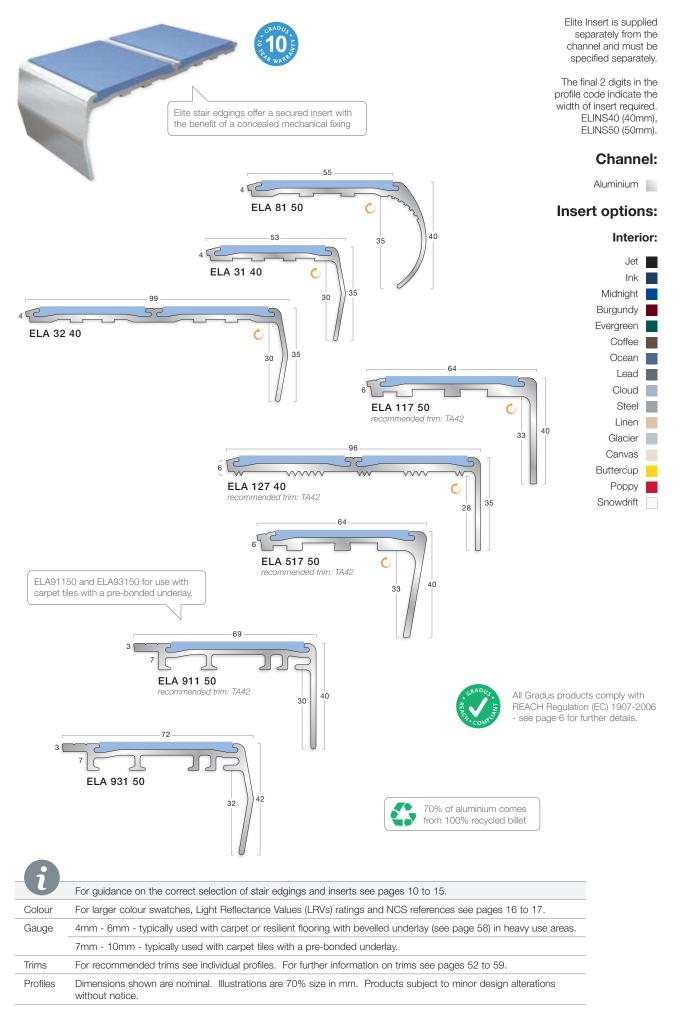
Profiles

001102875.

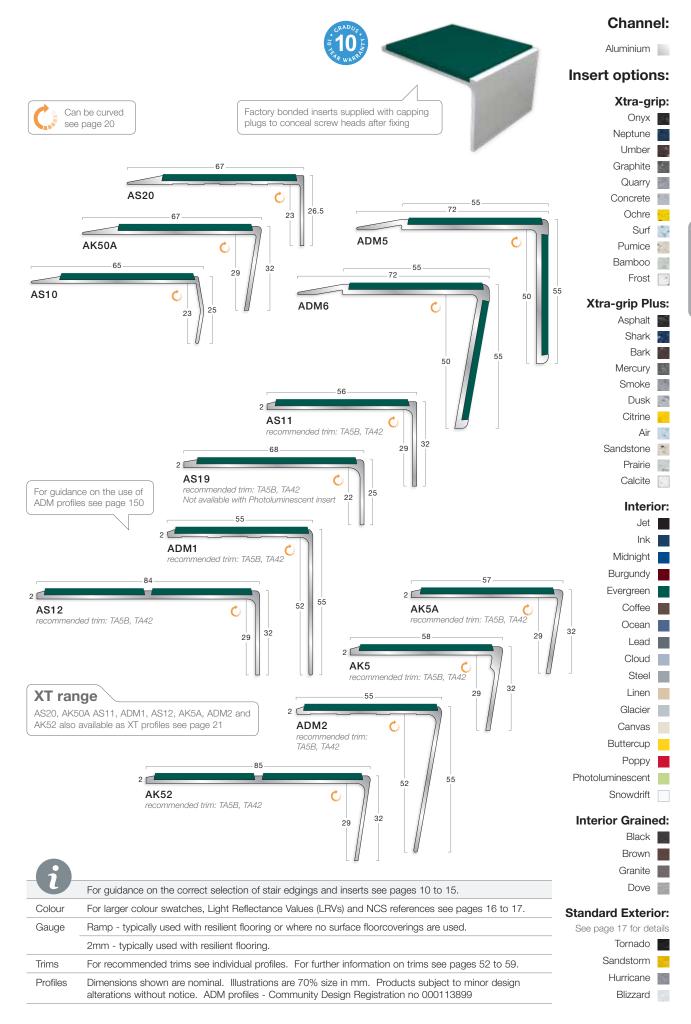
### Elite<sup>™</sup> - Aluminium



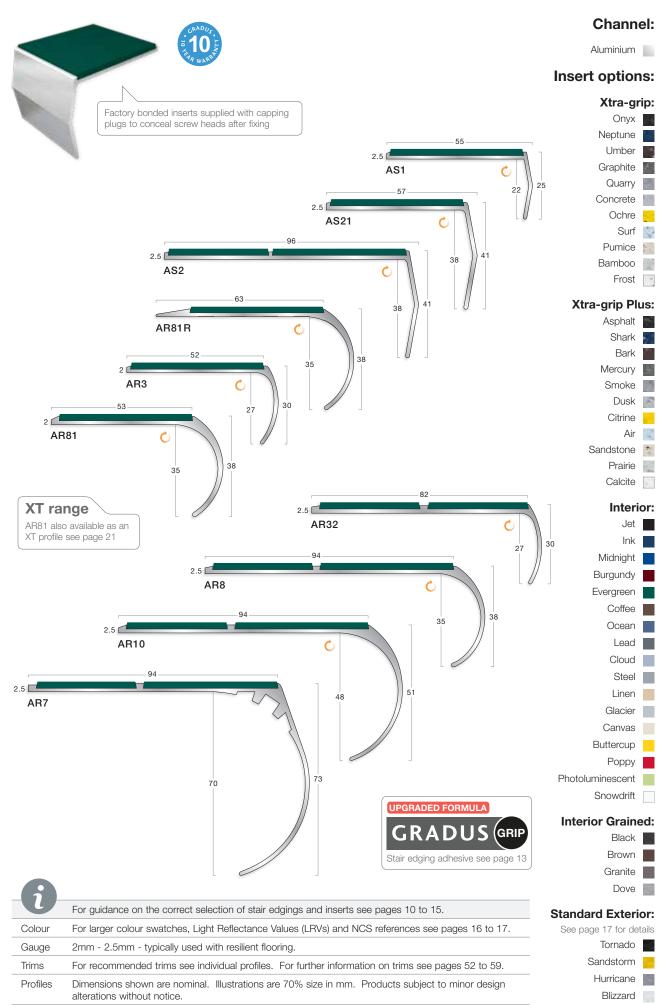
### Elite<sup>™</sup> - Aluminium



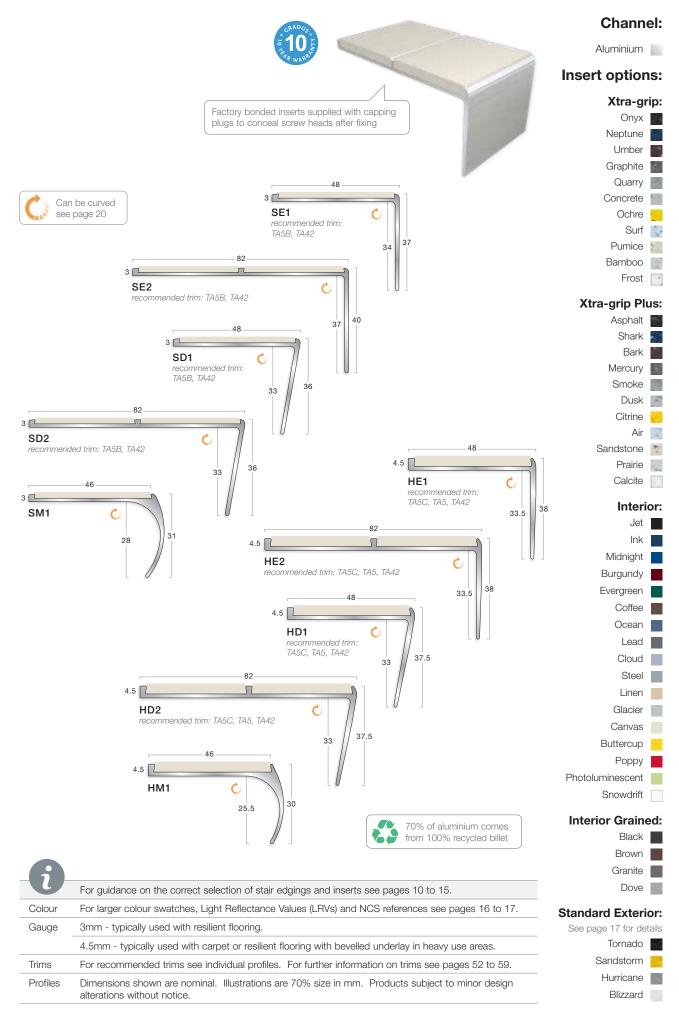
### Traditional - Aluminium A range



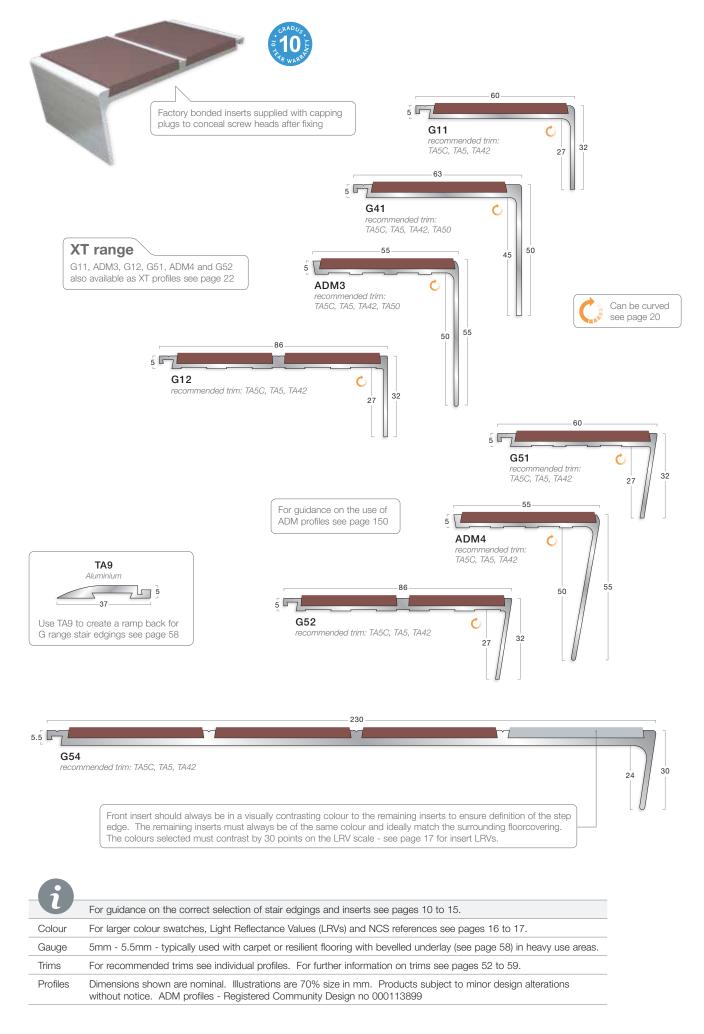
### **Traditional - Aluminium A range**



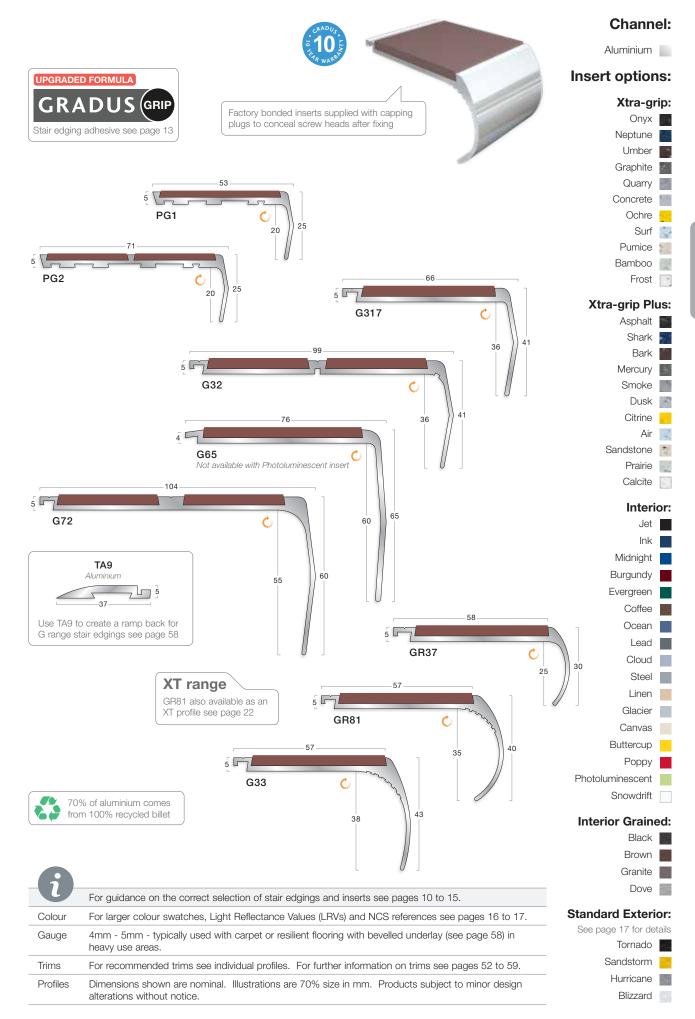
### Traditional - Aluminium S + H range



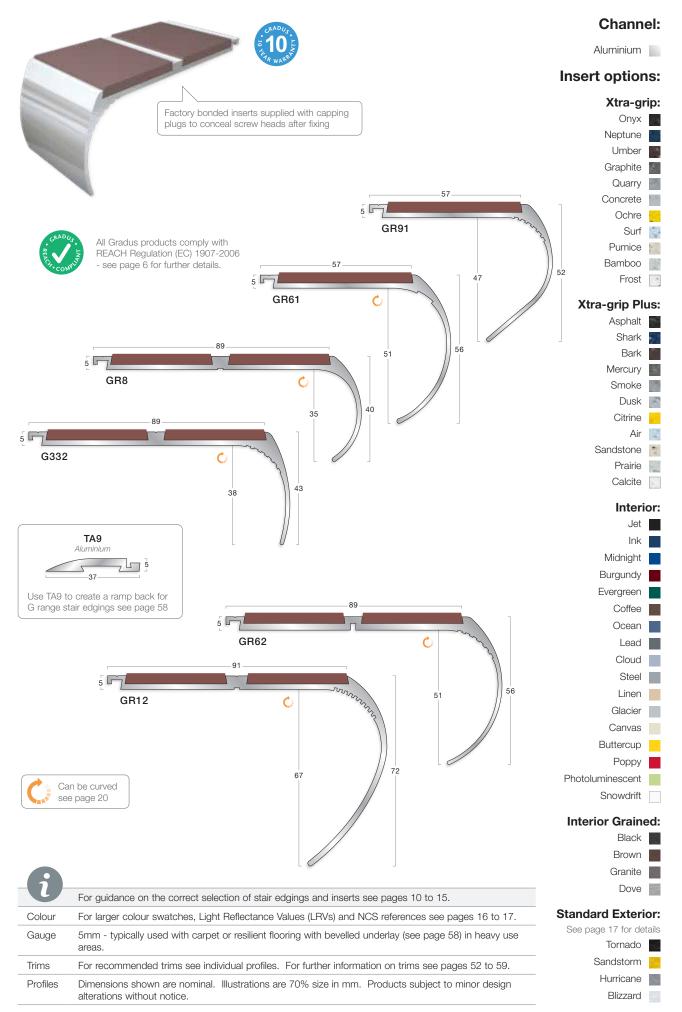
### Traditional - Aluminium G range



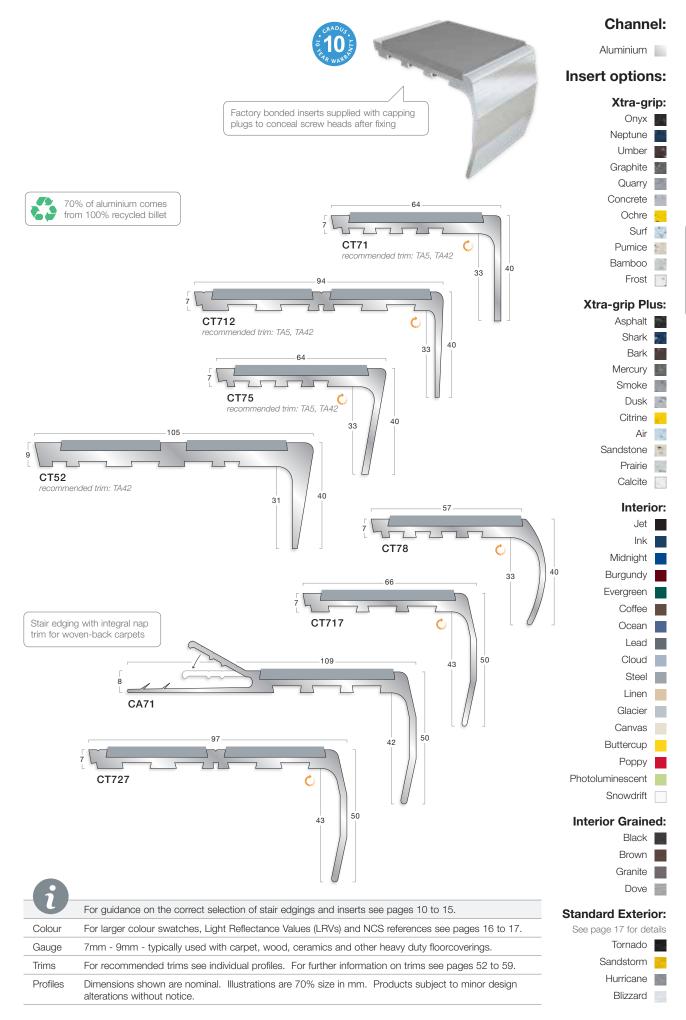
### Traditional - Aluminium G range



### Traditional - Aluminium G range



### Traditional - Aluminium CT range



Section (

### **Trans-Edge® - Stair Edgings**



A range of heavy-duty aluminium stair edgings incorporating an extremely durable, slip-resistant insert material, suitable for external and internal applications such as motorway foot bridges, railway stations, airports, sports stadia, outdoor arenas and heavy industry. Selected TEX stair edgings can also be used with tread plates and sheet material to form a heavy-duty stair and floor system - see pages 34 to 35.

### **Installation Advice:**

- TEX3R the front insert should always be in a visually contrasting colour to the remaining inserts to ensure definition of the step edge. The remaining inserts must always be of the same colour and ideally match the surrounding floorcovering. The colours selected must contrast by 30 points on the LRV scale see page 17 for insert LRVs.
- TEXE1 multiple pieces of TEXE1 can be joined together to increase slip-resistance along the tread depth. When using two or more TEXE1 extension profiles, these should be a contrasting colour to the stair edging insert to ensure step edge definition.

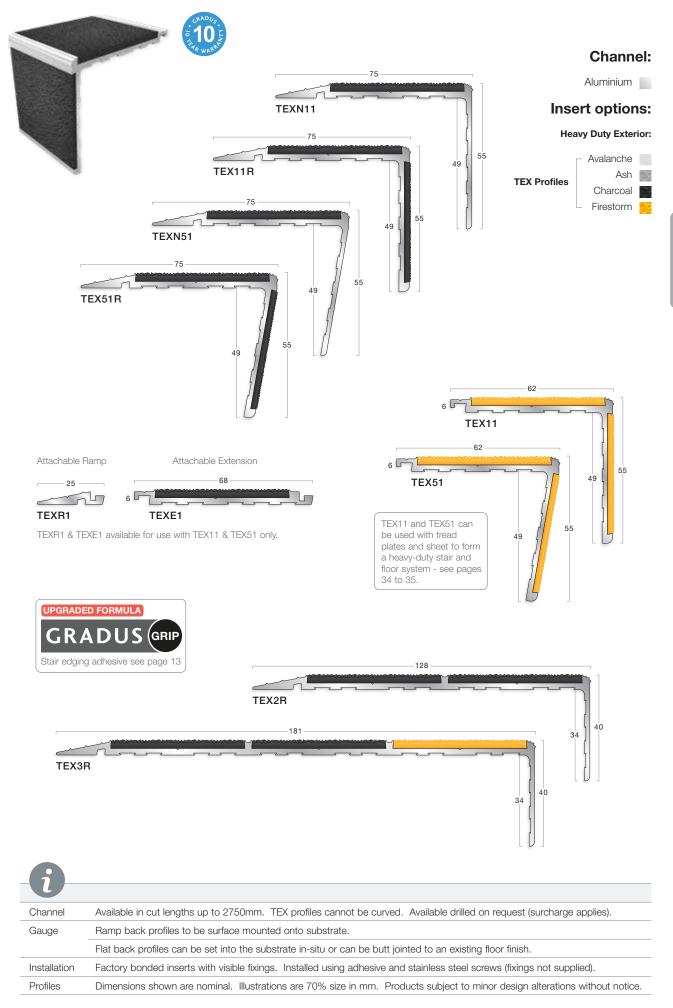
### Information:

- For guidance on the correct selection of stair edgings see pages 10 to 15.
- For larger colour swatches, Light Reflectance Values (LRVs) and NCS references see pages 16 to 17.



Visit: www.gradus.com to download: AutoCAD drawings, Gradus & NBS Specifications, Cleaning & Maintenance, Installation Guidelines and Health & Safety Data Sheets.

### Trans-Edge<sup>®</sup> - TEX range



### Trans-Edge<sup>®</sup> - Stair & Floor System



The Gradus Heavy-Duty Stair & Floor System offers a hard wearing solution to help reduce the risk of slips and trips in the most demanding environments. For use in both interior and exterior environments, this system features stair edgings and tread plates for use on stairs and sheet material for use on landings and walkways. These products can be used together to provide a slip-resistant flooring solution. Ideal for use in new build applications as well as refurbishment projects.

### **Installation Advice:**

- Installed using adhesive and stainless steel screws (fixings not supplied/screw head covers not available).
- Stair edging insert colours for TEX11 and TEX51 should be selected to provide a 30 point LRV difference with the tread plate.

### Information:

- For guidance on the correct selection of stair edgings see pages 10 to 15.
- For larger colour swatches, Light Reflectance Values (LRVs) and NCS references see pages 16 to 17.



# Trans-Edge<sup>®</sup> - Tread Plate & Sheet

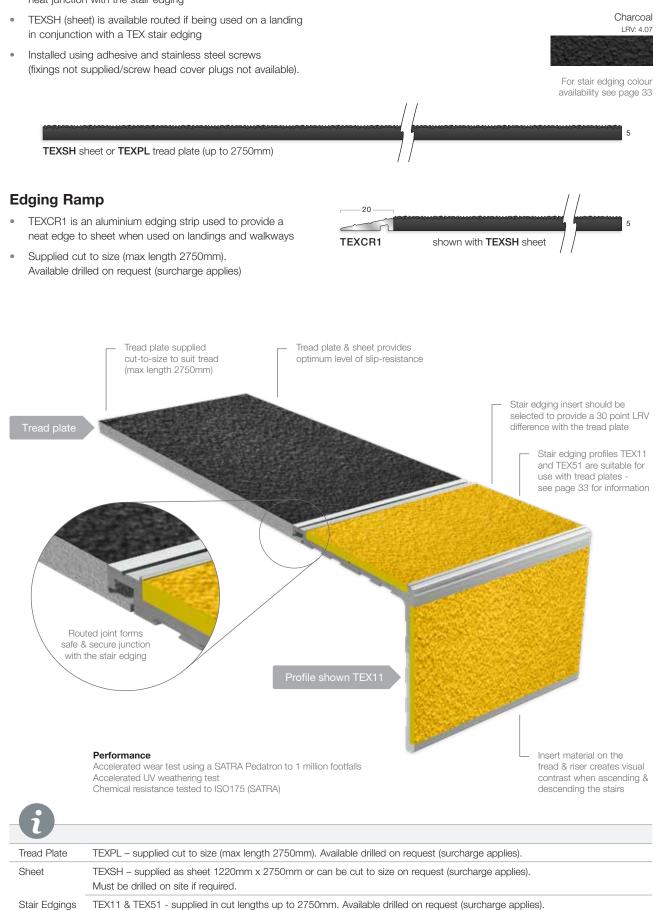
#### **Tread Plates and Sheet:**

Profiles

 Tread plates (TEXPL) are supplied routed to provide a safe, neat junction with the stair edging

#### **Colour options:**

#### TEXPL & TEXSH:



# **Chrome & Bronze - Stair Edgings**



Chrome & Bronze stair edgings offer premium finishes for prestigious locations.

Chrome stair edgings offer an attractive, contemporary finish and are suitable for light to medium traffic interior applications. Comprise chromed aluminium channels with slip-resistant inserts.

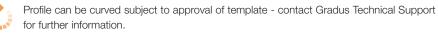
Bronze stair edgings are ideal for use in prestigious locations such as theatres, banks & hotels, and are suitable for both interior & exterior heavy traffic applications. Comprise polished manganese bronze channels with slip-resistant inserts.

#### **Choice of Profile:**

- Elite range (Chrome subject to minimum order quantities / surcharges)
- Traditional range

#### Information:

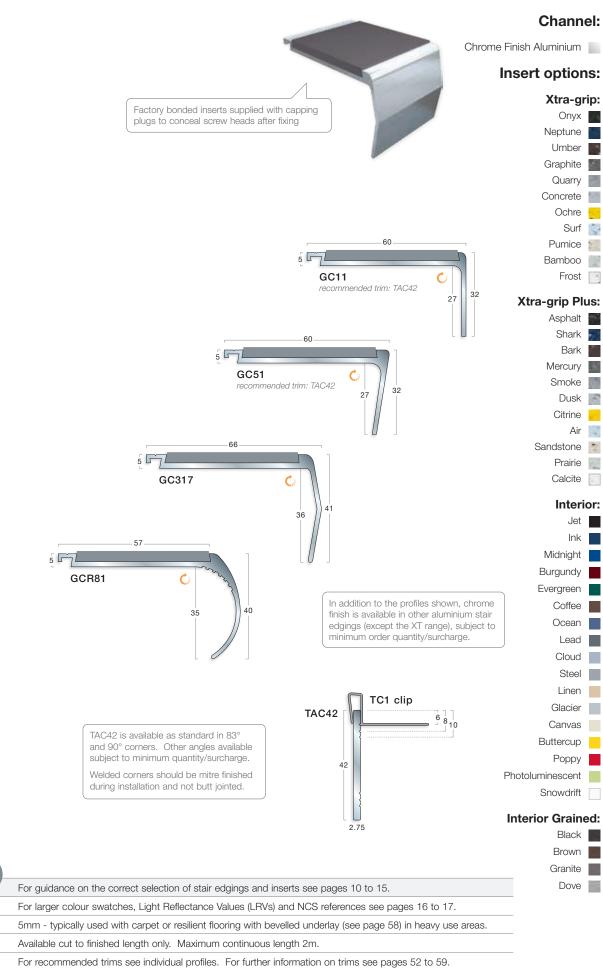
- For guidance on the correct selection of stair edgings see pages 10 to 15.
- For larger colour swatches, Light Reflectance Values (LRVs) and NCS references see pages 16 to 17.





Visit: www.gradus.com to download: AutoCAD drawings, Gradus & NBS Specifications, Cleaning & Maintenance, Installation Guidelines and Health & Safety Data Sheets.

## **Traditional - Chrome**



Colour

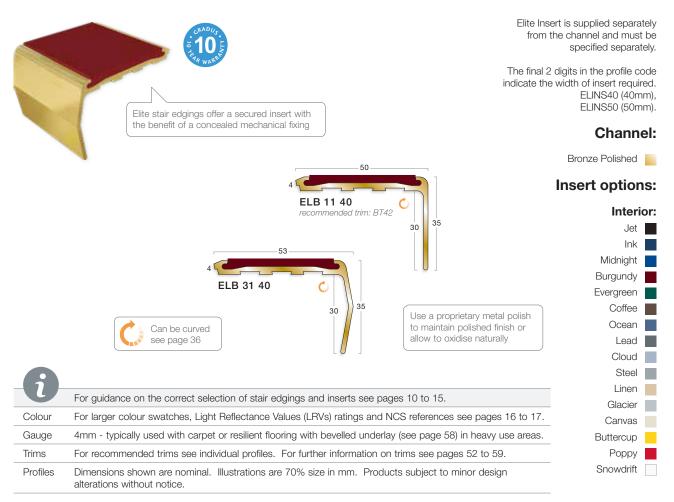
Gauge

Length

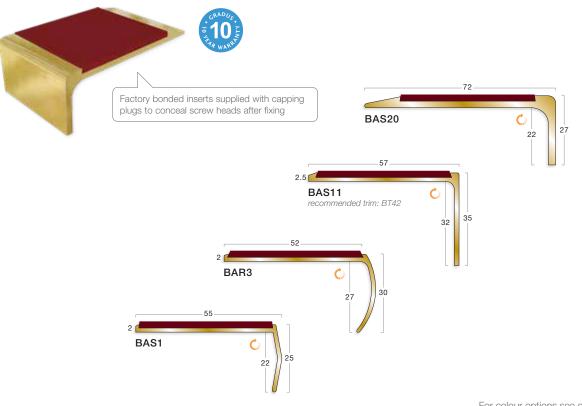
Trims

37

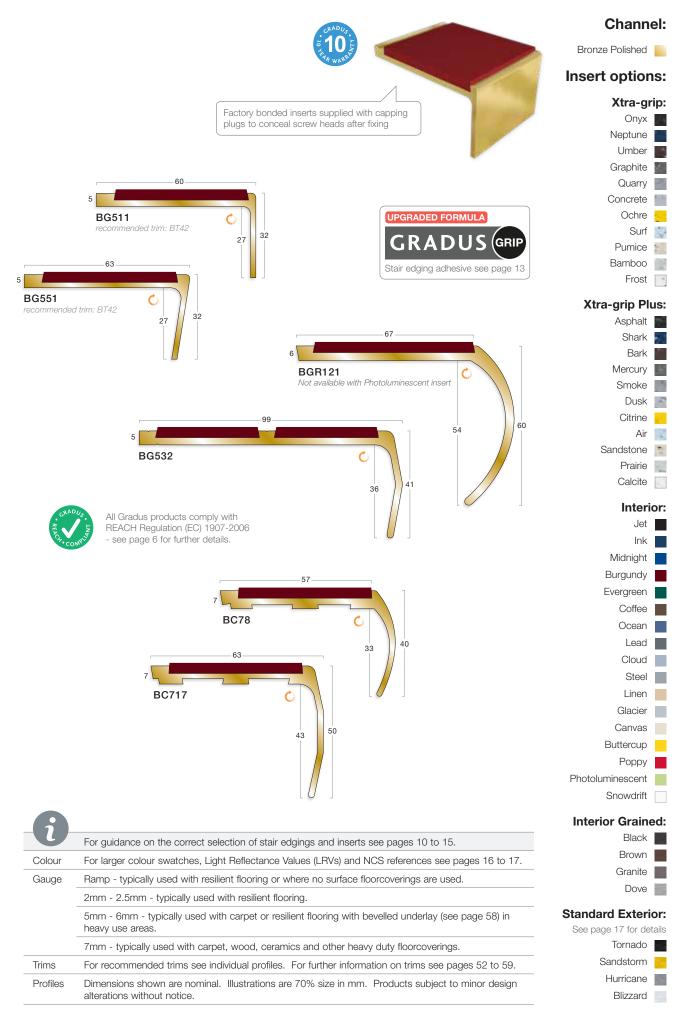
## Elite<sup>™</sup> - Bronze



## Traditional - Bronze BA range



# Traditional - Bronze BG + BC range



# PVC-u Hardnose<sup>™</sup> - Stair Edgings



Gradus Hardnose<sup>™</sup> is an extensive range of attractive and hardwearing stair edgings comprising coloured PVC-u channels and matching slip-resistant pvc inserts. Selecting the channel and insert in the same colour provides the ideal solution for creating a single solid band of colour which visually contrasts with the surrounding floorcovering. This defines the step edge in line with Approved Documents M and K, BS 8300-2:2018, BS 9266:2013, BRE and BS 5395-1:2010 (see pages 146 to 152).

#### **Choice of Profile:**

- XT range
- Traditional range

For guidance on selecting matching channel and insert colours that provide visual contrast on both the tread and riser, see pages 144-146.

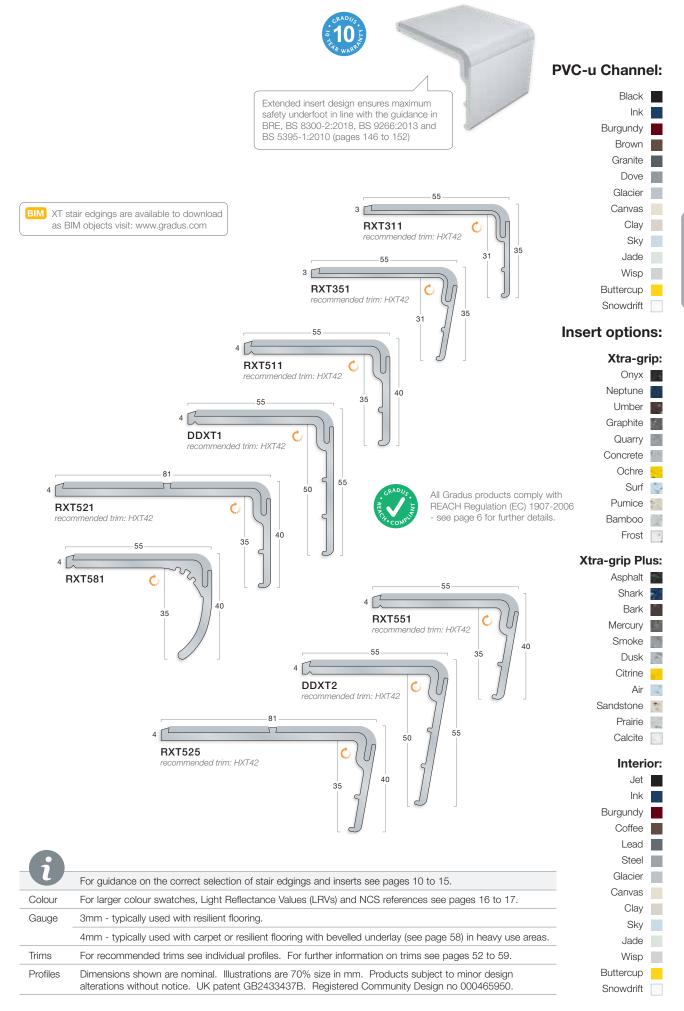
#### Information:

- For guidance on the correct selection of stair edgings see pages 10 to 15.
- For larger colour swatches, Light Reflectance Values (LRVs) and NCS references see pages 16 to 17.
- Profile can be curved subject to approval of template contact Gradus Technical Support for further information.

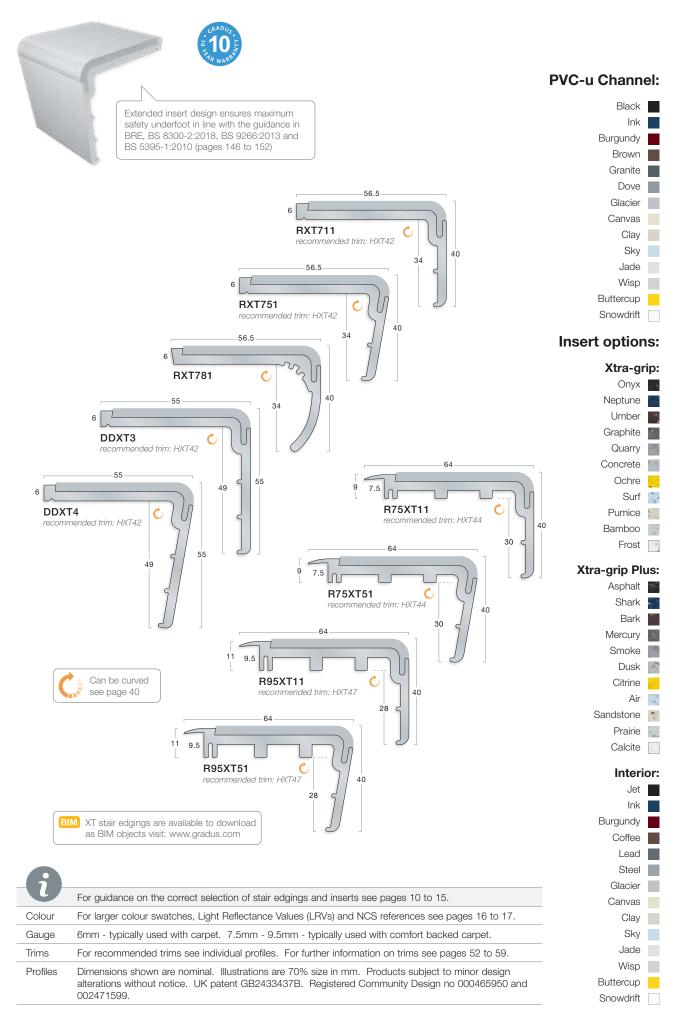


Visit: www.gradus.com to download: AutoCAD drawings, Gradus & NBS Specifications, Cleaning & Maintenance, Installation Guidelines and Health & Safety Data Sheets.

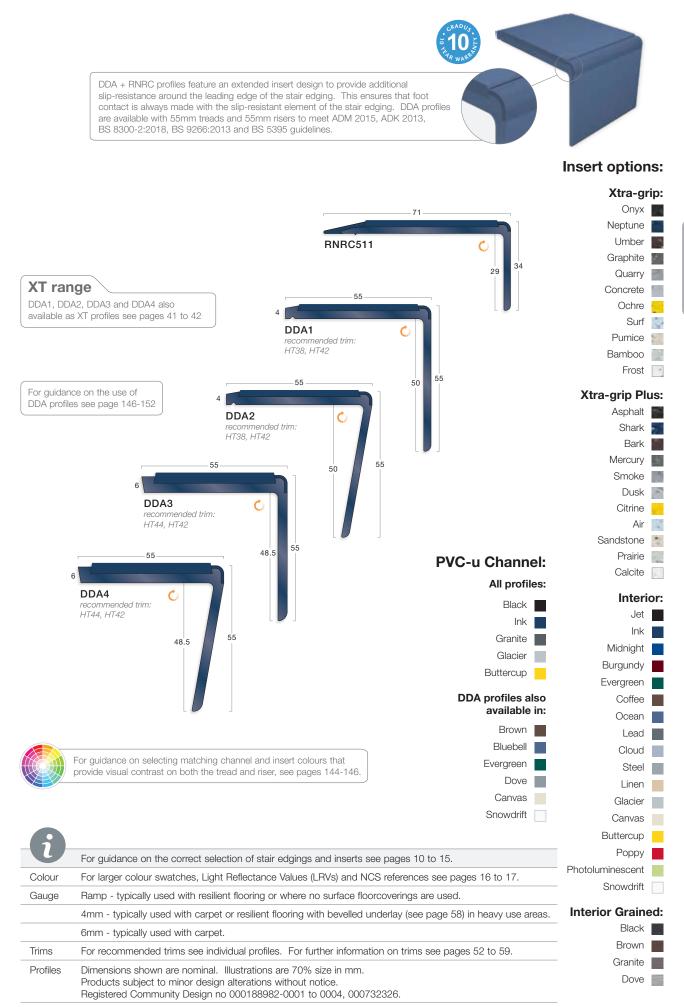
## XT - PVC-u Hardnose<sup>™</sup> - Satin Finish



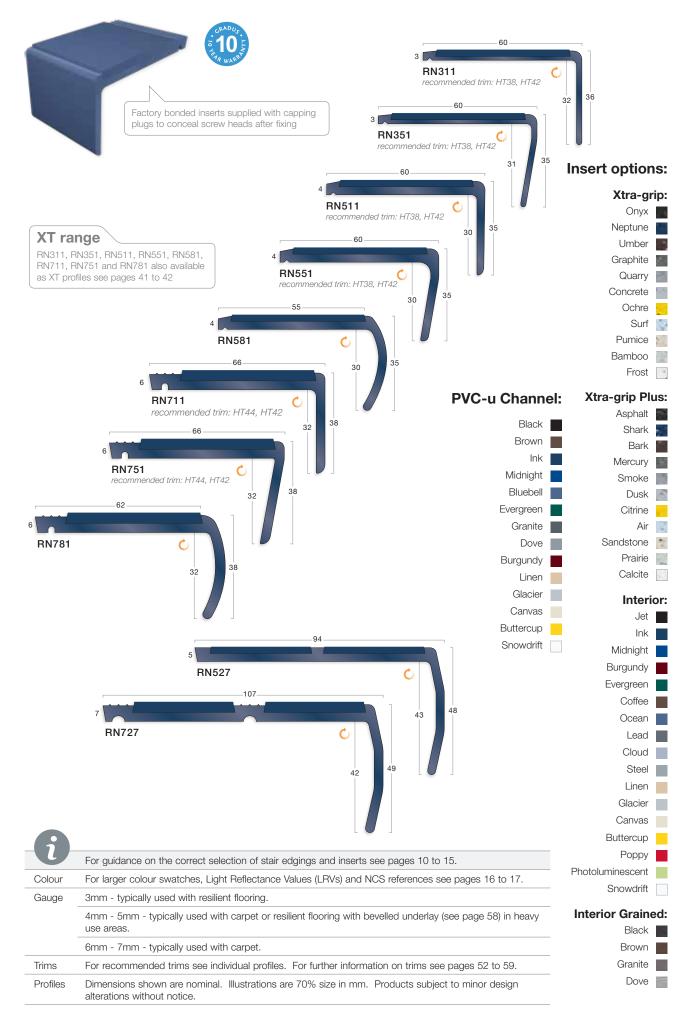
# XT - PVC-u Hardnose<sup>™</sup> - Satin Finish



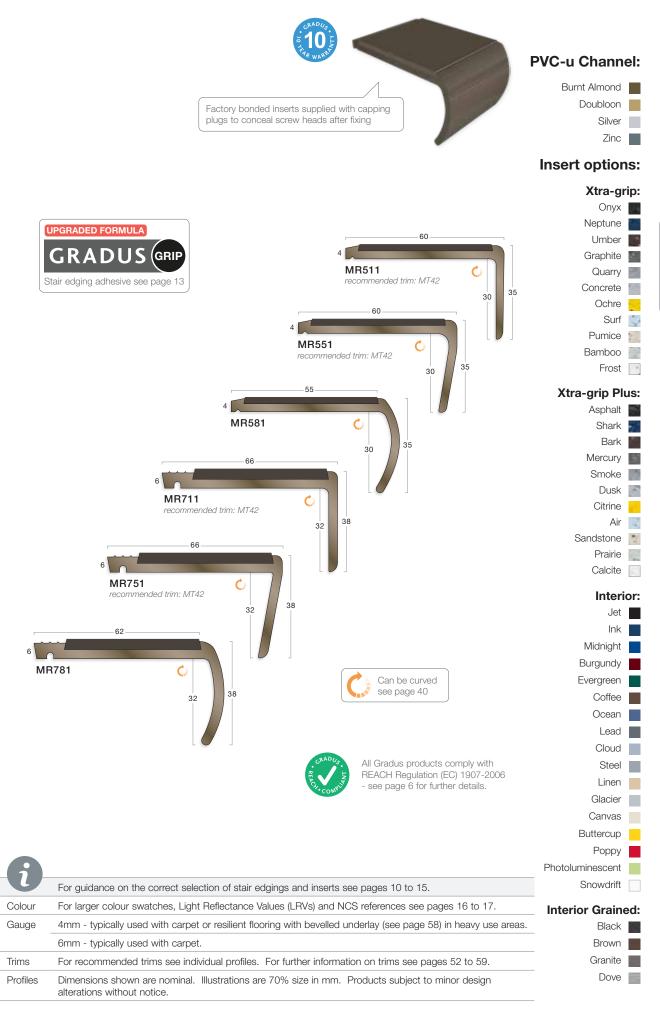
# Traditional - PVC-u Hardnose<sup>™</sup> - Satin Finish



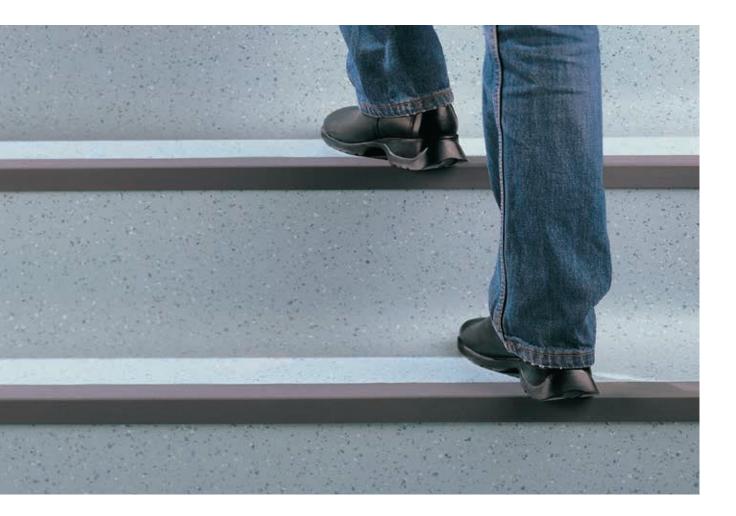
# Traditional - PVC-u Hardnose<sup>™</sup> - Satin Finish



# Traditional - PVC-u Hardnose<sup>™</sup> - Metallic Finish



# Flexible pvc - Stair Edgings



A range of one-piece slip-resistant stair edgings recommended for use on escape stairs and in other light traffic areas.

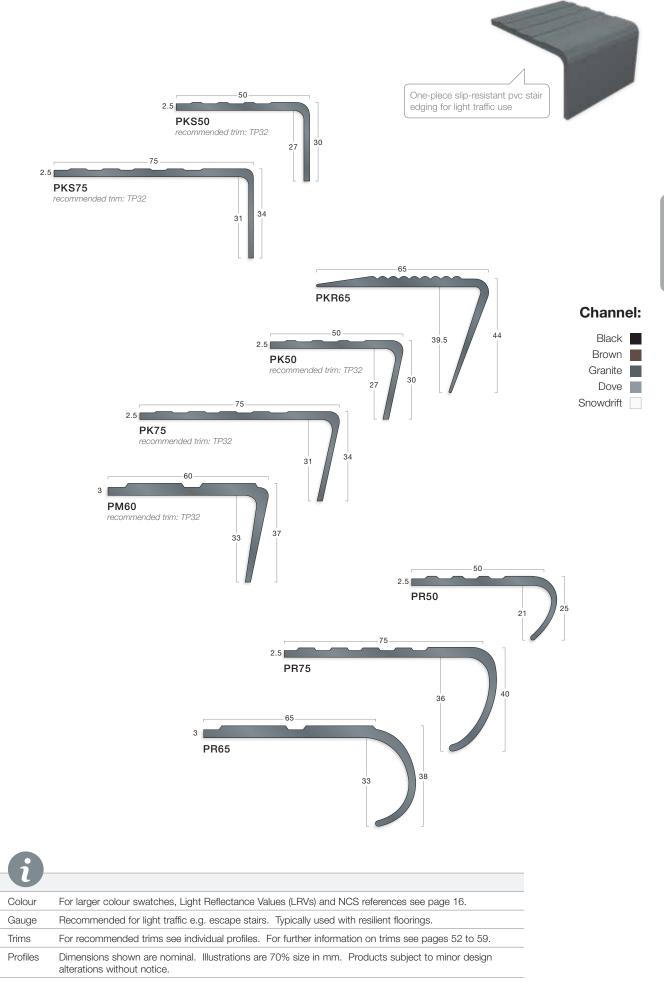
#### Information:

- Suitable for use in interior dry conditions.
- Supplied in 2.75m and 3.20m stock lengths.
- For larger colour swatches, Light Reflectance Values (LRVs) and NCS references see page 16.



Visit: www.gradus.com to download: AutoCAD drawings, Gradus & NBS Specifications, Cleaning & Maintenance, Installation Guidelines and Health & Safety Data Sheets.

## Flexible pvc



# **Illuminated Stair Edgings**



Gradus offers a range of safety and decorative lighting profiles for stairs. Profiles have been designed specifically to suit dark interior environments such as auditoria, where light is required for safety but should not detract from the primary function of the installation. By utilising LED technology, the system offers an extra low voltage (12v) alternative to mains voltage lighting.

#### **Choice of Profile:**

- XT range
- Elite range
- Traditional range
- More from Gradus LED Lighting Systems:
- Aisle & floor lighting
- Floor mounted illuminated letters & numbers
- Wall lighting (also known as usher lighting)
- Linear lighting

To view our full range visit our website or request a brochure

#### Information:

- For guidance on the correct selection of stair edgings see pages 10 to 15.
- For larger colour swatches, Light Reflectance Values (LRVs) and NCS references see pages 16 to 17.
- Design, quotation and installation service available.

Visit: www.gradus.com to download: AutoCAD drawings, Gradus & NBS Specifications,

Cleaning & Maintenance, Installation Guidelines and Health & Safety Data Sheets.

# **Step Lighting Effects**

#### Interlok Advance™

- Interlok Advance is an LED lighting system that offers a pinpoint lighting effect
- The Interlok Advance effect is created using circuit board strips with LEDs spaced at 50mm or 100mm intervals

#### Continuity™

- An LED lighting system that offers a continuous linear lighting effect for a modern finish in low light environments
- The Continuity lighting effect is created using a fibre optic rod that is end-illuminated with high intensity LEDs (IP44)



# Section (

#### **Achieving Different Lighting Effects**

Both Continuity and Interlok are housed within a PVC-u tube that fits into the nosing. Within our PVC-u stair edgings range, the tube can be rotated to achieve a variety of different lighting angles and effects. Altering the position of the Interlok Advance LED strips provides further lighting options. See the below examples of the different effects that can be achieved.

#### **PVC-u PROFILES**



To view the full range visit www.gradus.com or request a lighting brochure.

# **Illuminated Stair Edgings**

Gradus offers a range of aluminium and PVC-u stair edging profiles that can incorporate either the Continuity or Interlok Advance LED lighting systems.

#### **PVC-u Profiles**

- Clear profile allows light to project through
- Illuminated stair edging is visible when ascending & descending the staircase

#### **Aluminium Profiles**

- Light is projected directly from the tube
- The angle at which the illumination is visible depends on the profile design

CODE / PROFILE	DESCRIPTION	LED	INSERT
RXT1218L	Clear/Coloured PVC-u Channel Up & Angled Illumination	Interlok Advance™ Continuity™	Interior
RNT1218L	Clear PVC-u Channel Illumination on front gives all round visibility	Interlok Advance™ Continuity™	Xtra-grip Xtra-grip Plus Interior
RNT718L	Clear PVC-u Channel Illumination on front gives all round visibility	Interlok Advance™ Continuity™	Xtra-grip Xtra-grip Plus Interior
ELAF5150	Black Anodised Aluminium Channel Angled Illumination on tread / riser	Interlok Advance™ Continuity™	Interior
ATD71L	Aluminium Channel (can also be supplied anodised) Illumination on tread and/or riser	Interlok Advance™ Continuity™ LED Decortape (downlight only)	Xtra-grip Xtra-grip Plus Interior

CODE / PROFILE	DESCRIPTION	LED	INSERT	LED choice:
ATD121L				Interlok Advance™ + Continuity™:
	Aluminium Channel (can also be supplied anodised) Illumination on tread and/or riser	Interlok Advance™ Continuity™	Xtra-grip Xtra-grip Plus Interior	Blue Green Amber Red White White
AT718L				Channel:
	Aluminium Channel (can also be supplied anodised)	Interlok Advance™	Xtra-grip Xtra-grip Plus	Clear PVC-u
7/	Illumination from	Continuity™	Interior	Insert:
	front of profile			Xtra-grip: Onyx
ATNG71L				Neptune
	Aluminium Channel (can also be supplied anodised) Angled illumination on tread / riser	Interlok Advance™ Continuity™	Xtra-grip Xtra-grip Plus Interior	Umber Graphite Graphite Quarry Concrete Concrete Concrete Concrete Concrete Surf Surf Surf Surf Surf Surf Fumice Surf Form Concrete Concre
ELAF2350				Xtra-grip Plus:
94 6.5 30	Black Powder Coated Aluminium Channel Angled Illumination on tread / riser	Interlok Advance™ Continuity™	Interior (ELINS30 insert sold separately)	Asphalt Shark Shar
ATF71L	Al			Prairie Calcite
	Aluminium Channel (can also be supplied anodised) Illumination on tread and/or riser	Interlok Advance™ Continuity™	Xtra-grip Xtra-grip Plus Interior	Interior: Jet Ink Midnight Burgundy Evergreen Coffee Ocean
AS1106L				Lead Cloud
	Aluminium Channel (can also be supplied anodised) Illumination from front of profile	Interlok Advance™ Continuity™	Xtra-grip Xtra-grip Plus Interior	Steel Linen Glacier Canvas Buttercup Poppy Photoluminescent Snowdrift

To view the full range visit www.gradus.com or request a lighting brochure.

Section (1

# **Guide to Stair Trims & Welded Corners**

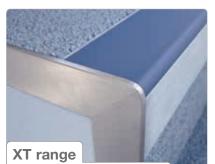
#### Description

A

Welded corners are designed to form a neat and attractive edge around the open end of a step by concealing the edge of the floorcovering and stair edging.

Welded corners are supplied pre-welded to suit the angle between the riser and tread of the step (78°- 90°). They are available in a variety of gauges to suit different floorcoverings. Welded corners are available with either a fixed flange or separate fixing clips as shown on the opposite page. When selecting the appropriate welded corner the thickness of the screed, the floorcovering and the combined thickness of the stair edging riser and floorcovering must be considered to ensure a neat finish. Profiles are also available in longer lengths to be used as trimming strips on landings etc.

In addition to welded corners a range of specialist stair trims can be found on the following pages (54 to 59).



For details on XT side trims and welded corners refer to page 56 (Aluminium and PVC-u Hardnose).

#### Nap Trim

Ø

Aluminium or bronze nap trims (see page 59) available with or without carpet gripper, butt joint to the back edge of the stair edging to form a neat finish to the floorcovering. Ideal for use with Axminster or other woven backed carpets. The top is closed using a block of wood and a rubber mallet. Fixed with screws and adhesive.

#### Mitre Joint

Welded corners with TC2 clips must be mitred. TAC42, TAXT5212 and TAXT523 should also be mitred.

# Type of Jointing

B

#### **Butt Joint**

С

Two adjoining welded corners can be butt jointed for all corners with TC1 clips and fixed tabs (except TAC42).

D

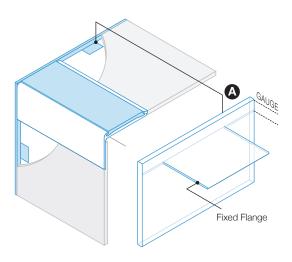
#### Note

To achieve an optimum finish the angle between each riser and tread should be the same. Remedial work may need to be undertaken prior to installation to achieve this.

#### Welded Corner with Fixed Flange

Welded corners are fabricated using a trimming strip of the correct gauge to suit the thickness of the floorcovering. Different types of trimming strip can be combined on the tread and riser to accommodate the combined thickness of the floorcovering and riser of the stair edging e.g. TA5B (tread)/TA5 (riser). Welded corners are fixed with a proprietary cartridge adhesive.

Note: the use of a latex screed to disguise the fixing flange may be required when using vinyl or linoleum (see page 54).

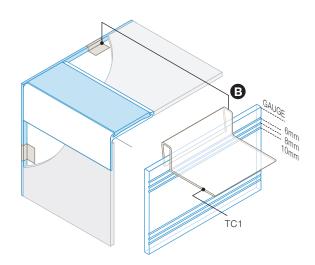


#### Welded Corner with TC2 Clips

TA50, TA66 and BT42 all use the TC2 clip which is made from spring steel and is used in approximately the same positions as TC1 but is left in position after the proprietary cartridge adhesive cures (see page 55).

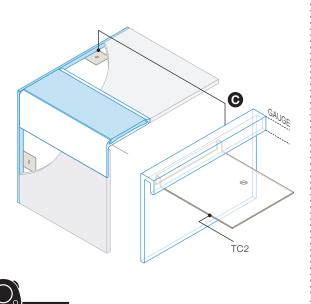
#### Welded Corner with TC1 Clips

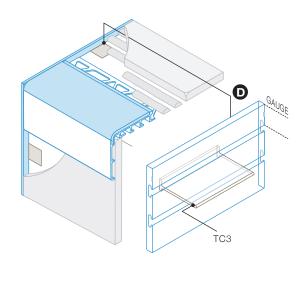
HT42, HXT42, MT42, TA42, TA42 and TAXT42 all use the TC1 clip which is adjustable to provide an upstand of 6mm, 8mm or 10mm on the tread or riser. The clip is positioned in one of the grooves using two clips per tread and one per riser and the side trim is then fixed on with proprietary cartridge adhesive. When this has cured the clip is removed. Different clip positions can be used on the tread and riser to allow for the combined thickness of the floorcovering and riser of the stair edging (see page 55).



#### Welded Corner with TC3 Clips

TAXT5212 and TAXT523 utilise aluminium TC3 clips that slide on to the profile using the locating grooves to form the flange. The clips provide a gauge of either 10mm, 12.5mm or 15mm to work with CXT1, CXT2 or CXT3 stair edgings. The TC3 fixing clips (tabs) remain in place once the side trim has been installed (see page 56).







Gradus Accessories offers a **Free Measuring & Templating Service** for stair edgings to ensure optimum product selection. Contact Technical Support on 01625 428922 to request your measure (terms and conditions apply).

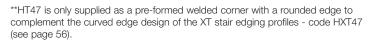
## **Stair Trims**



# Welded Corners and Trimming Strips with Fixed Flange

Section	Gauge	Stock Lengths	78° – 90° LH or RH	83° & 90° Universal	Fixed Tabs	Site Join
TA1	2.5mm	2.75m	-	-	1	-
TA2C	5mm	2.75m	-	-	1	-
TA5	6.5mm	2.75m	1	1	1	butt
TA5B*	3.5mm	2.75m	1	1	1	butt
TA5C	5mm	2.75m	1	-	1	butt
TP32	4mm	2.75m	-	-	1	butt
HT38	5mm	2.75m	1	1	1	butt
HT44*	10mm	2.75m	1	1	1	butt
HT47**	12mm	2.75m	-	-	1	butt

\*TA5B and HT44 can be supplied as TAXT5B and HXT44 - pre-formed welded corners with a rounded edge to complement the curved edge design of the XT stair edging profiles (see page 56).



TA1

Aluminium

<u>η 2.5</u>

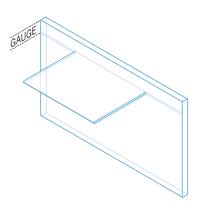
3.5

0

18

19

16



#### **Colour options:**



HT38, HT42 and HT44 also available in:



HT42, HT44 and HT47 also available in:



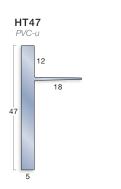
Metallic PVC-u (MT):



# Flexible pvc (TP):



TA5C Aluminium 5 19 32

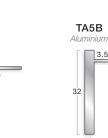


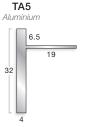
**TP32** 

DVC

32

16

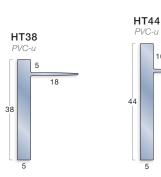




TA2C

Aluminium

25



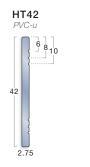


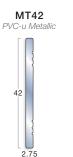
# Welded Corners and Trimming Strips with TC1 Clips

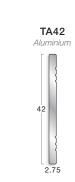
Section	Gauge	Stock Lengths	78° – 90° LH or RH	83° & 90° Universal	Fixing Clips	Site Join
HT42*	6-8-10mm	2.75m	1	1	TC1	butt
MT42	6-8-10mm	2.75m	1	1	TC1	butt
TA42**	6-8-10mm	2.75m	1	1	TC1	butt
TAC42	6-8-10mm	2.00m	1	1	TC1	mitre

\*HT42 can be supplied as HXT42 - a pre-formed welded corner with a rounded edge to complement the curved edge design of the XT stair edging profiles (see page 56).

\*\*TA42 can be supplied as TAXT42 - a pre-formed welded corner with a rounded edge to complement the curved edge design of the XT stair edging profiles (see page 56).

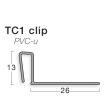








2.75



GAUGE 8mm 10mm



**BT42** 

Bronze

42

10

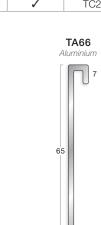
# Welded Corners and Trimming Strips with TC2 Clips

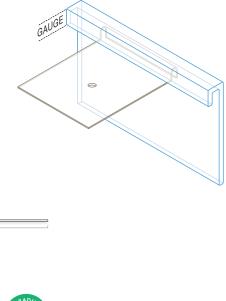
TC2 clip

Stee

Section	Gauge	Stock Lengths	78° – 90° LH or RH	Fixing Clips	Site Join
BT42	10mm	2.75m	1	TC2	mitre
TA50	7mm	2.75m	1	TC2	mitre
TA66	7mm	2.75m	1	TC2	mitre

TA50 Aluminium 50



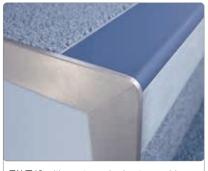




-50-

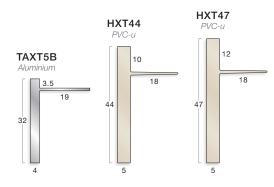
All Gradus products comply with REACH Regulation (EC) 1907-2006 - see page 6 for further details. Section (

## Side Trims and Welded Corners for XT Stair Edgings



TAXT42 with contoured edge to provide a flush, neat finish to the stair edging profile

#### Welded Corners with Fixed Flange



Welded Corners with TC3 Clips

Aluminium Tab 10 Position 1 52 ſ

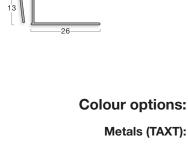
**TAXT5212** 





**TAXT523** 





TC1 clip

PVC-u

Side trims and welded corners are designed to form a neat and attractive edge around the

Gradus side trims TA42, TA5B, HT42, HT44 and HT47 can be ordered in straight lengths for on-site fabrication or can be supplied as pre-formed welded corners TAXT42, TAXT5B, HXT42, HXT44 and HXT47. When ordered as TAXT42 / TAXT5B / HXT42 / HXT44 / HXT47 the apex of the welded corner is contoured to a rounded edge to match the curved edge design of the XT stair edging profiles, providing a flush, neat finish.

Welded Corners with TC1 Clips

6 8 10

HXT42

42

2 75

TAXT42

Aluminium

42

2 75

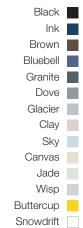
6 8 10

open end of a step by concealing the edge of the floorcovering and stair edging.

Metals (TAXT):

Aluminium

PVC-u (HXT):



#### **Welded Corners**

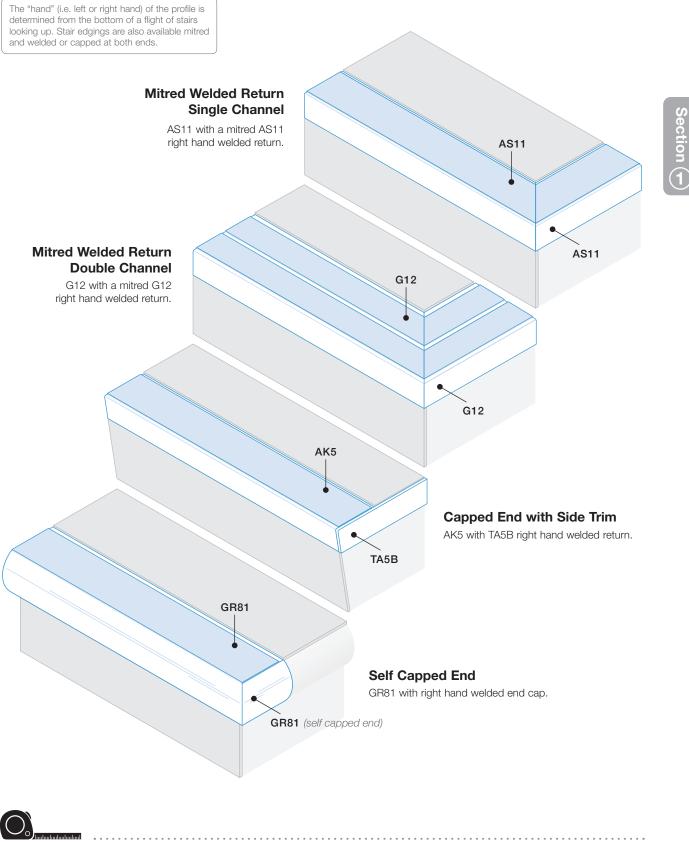
#### **Trimming Strips**

Section	Gauge	78° – 90° LH or RH	83° & 90° Universal	Fixing	Site Join	Trimming Strip for use on landings See pages 52 to 53	Section ref.	Stock Lengths
TAXT5B	3.5mm	1	1	Fixed Tab	butt	TAXT5B can be supplied as stock lengths	TA5B	2.75m
HXT44	10mm	1	1	Fixed Tab	butt	HXT44 can be supplied as stock lengths	HT44	2.75m
HXT47	12mm	1	1	Fixed Tab	butt	HXT47 can be supplied as stock lengths	HT47	2.75m
TAXT42	6-8-10mm	1	1	TC1 Clips	butt	TAXT42 can be supplied as stock lengths	TA42	2.75m
HXT42	6-8-10mm	1	1	TC1 Clips	butt	HXT42 can be supplied as stock lengths	HT42	2.75m
TAXT5212	10-12.5mm	1	-	TC3 Clips	mitre	TAXT5212 can be supplied as stock lengths	TAXT5212	2.75m
TAXT523	15mm	1	-	TC3 Clips	mitre	TAXT523 can be supplied as stock lengths	TAXT523	2.75m



## Welded Returns & Capped Ends

Most stair edgings featured in the Gradus product range can be fabricated to form a neat finish to the open side(s) of the stair in the form of welded returns or capped ends. The diagram below illustrates some examples of the fabrications that are available.

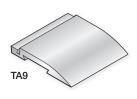




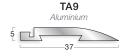
Gradus Accessories offers a **Free Measuring & Templating Service** for stair edgings to ensure optimum product selection. Contact Technical Support on 01625 428922 to request your measure (terms and conditions apply).

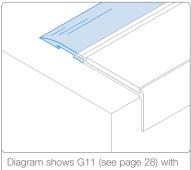
## **Stair Trims**

**Edge Trim** 



TA9 is an aluminium trimming strip used with G range stair edgings to form a safe ramp where resilient or no floorcovering is used (see pages 28 to 30).





TA9 ramping strip providing a transition where no floorcovering is used.



Diagram shows BU200 bevelled underlay

being used to build up a 3.2mm linoleum

to ensure a flush finish with the back edge of a G11 stair edging (5mm gauge

see page 28).

TA6 is an aluminium trimming strip used to form a central run of resilient floorcovering on stairs and landings. Can also be used on the riser.



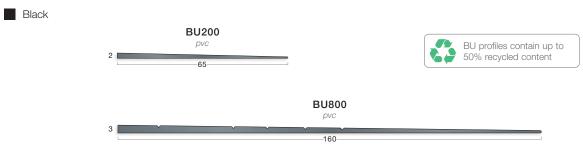


#### **Bevelled Underlay**

Bevelled underlay is a flexible pvc material used as a diminishing strip and is ideal for building up resilient floorcoverings for use with 5mm stair edgings. This is an ideal solution where a heavy-duty stair edging is required with a resilient floorcovering.

Grooves along the length of the underlay provide a straight cutting edge at points where the thickness gives ideal height adjustment. Bevelled underlay is fitted with a proprietary contact adhesive and it is advisable to feather the tapered edge with a thin layer of latex cement.

#### **Colour option:**



## **Stair Trims**



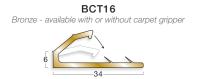
Aluminium or bronze nap trims available with or without carpet gripper. Butt joint to the back edge of the stair edging to form a neat finish to the floorcovering. Ideal for use where an Axminster or other woven backed carpet is used. The top is closed using a block of wood and/or rubber mallet. Fixed with screws and adhesive.

All Gradus products comply with

see page 6 for further details.

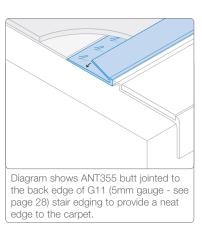
REACH Regulation (EC) 1907-2006

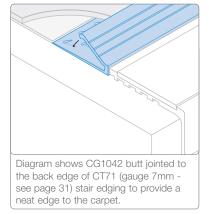
Nap Trim



ANT355 Aluminium - available with or without carpet gripper









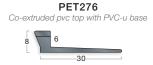
A co-extruded PVC-u feature strip for use between carpets, resilient floorcoverings and ceramic tiles or to form an edge to a floorcovering (see diagram).

#### **Colour options:**



#### Square Edge

CG1042 Aluminium - available with or without carpet gripper



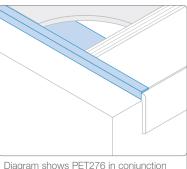


Diagram shows PET276 in conjunction with RN711 (gauge 6mm - see page 44) with a special on-site fabrication being used to protect the exposed edge of the carpet and form a 'carpet runner'.



# **Section 2**

# **Transition Strips**

Information to ensure the correct selection of transition strips along with details of colour availability. Details of all Gradus transition strips and specialist floor trims can be found in this section.

# **Transition Strip Colours**

#### **Bronze / Brass** Aluminium **Pvc Standard Pvc Metallics** Wood Finish Polished Brass / F7 Mill Finish / Natural Black Burnt Almond H30 - Light Oak LRV: 5 LRV: 10 Natural Brass F0 Natural Brown LRV: 6 Zinc H20 - Dark Beech LRV: 15 Polished Bronze F3 Polished Coffee LRV: 6 Doubloon H22 - Light Beech LRV: 21 Granite H40 - Maple L RV: 13 Platinum I RV: 42 Below is a selection Below is a selection of specialist finishes of finishes that are that are applied to Lead Silver applied to aluminium LRV: 13 LRV: 49 The above are wood a polished brass material. material. effect finishes that are applied to aluminium Polished Chrome Polished Silver Bluebell LRV: 8 material. Satin Chrome Etched Silver Dove I RV: 27 **Brushed Stainless Steel** F4 Silver Anodised Steel LRV: 27 Pearl Nickel F5 Gold Anodised Fawn LRV: 18 Note: Satin Nickel F9 Sand Anodised Clay LRV: 48 LRV readings apply to the following products: MTS Multi-Trim System - PVC-u (page 68) Clip-Top (page 70) Clip-Top fx (page 73) F6 Bronze Anodised Canvas LRV: 53 Wetroom Transition Strips (page 116) For details of LRV readings for all other products, contact Gradus on 01625 428922. **Stainless Steel** F8 Polished

Please note: Due to the limitations of the printing process, colours within this catalogue should not be relied upon for colour matching. An accurate colour match can only be achieved by requesting the relevant product sample(s) from Gradus Technical Support on 01625 428922.

F8G Matt

# **Colour Availability**

The table below can be used to show colour and finish availability of various profiles. Non-standard colours are also available and special colours can be matched upon request subject to minimum quantity and lead time. For further information contact Technical Support on 01625 428922.

Material		Colour/Finish	Luxury Trim System	Clip-Top PVC-u + Clip-Top fx + MTS PVC-u	GT61R + CET	MTS Aluminium	Design-Clip	Sdd	Euro-Clip	Cable Ducts + DT + PCR + PET + T + EJC + CVT + CTR	TH495	Clip-Top Metallic PVC-u + GT61M	BU	BCT	SCS + SCSP + ETR-GF8 + MJ-F8	SCS + SCSM	WTS	Matwell Frames (RMF & UMFA) + ACS38 + ACS52 + ACT + ANT + AVR + CG + JC + TA	ACS441 + ACS444 + ACS470S + TH382 + TH383+ JT + ET + RT	ACS462 + ACS463	AJC + JT-EB + ET-EB + TP-F4 + MJ-F4 + CVA927	BCS + ETR-F7 + ETR-GF7 + TP-F7	ETR-F0 + ETR-UF0 + ETR-GF0	AR268	FRB Matwell Frame	CVA870IW
		Polished Chrome	•																							
		Satin Chrome	•																							
		Brushed Stainless	-																							
<b>_</b> /		Steel	•																							
Bronze / Brass		Pearl Nickel	•																							
21033		Satin Nickel	•																							
		Polished Brass / F7	•																			•				
		Natural Brass																							•	
		Polished Bronze												٠												
		Polished Silver				٠																				
		F3 Polished																	•	•						
		Mill Finish / Natural																•								
		F0 Natural																					•	•		
Aluminium		Etched Silver				٠																				
		F4 Silver Anodised					٠	•											•		•			•		•
		F5 Gold Anodised						•																		
		F9 Sand Anodised																								•
		F6 Bronze Anodised																								•
		Black		•	٠					•			•													
		Brown		•	٠					•																
		Coffee															•									
		Granite		•	٠					•																
Pvc		Lead															٠									
Standard		Bluebell		•	•																					
		Dove		•	•					•																
		Steel															•									
		Fawn		•																						
		Clay		•	•												•									
	_	Canvas										-					•									
		Burnt Almond										•														
Pvc		Zinc									•	•														
Metallics		Doubloon									•	•														
		Platinum Silver									•	•														
		H30 - Light Oak							•		-															
Mood		H30 - Light Oak H20 - Dark Beech							•																	
Wood Finish		H20 - Dark Beech H22 - Light Beech							•																	
		H22 - Light Beech H40 - Maple							•																	
Chaimlana	Ť	F8 Polished	_			-									•											
Stainless Steel	÷.	F8G Matt														•										
		FOG Mall																								

For FCA16, Trans-Edge trims & RAM012 see individual profile pages 117, 83 and 85 respectively for details of colour availability.

# **Luxury Trim System**



#### Description

The Gradus Luxury Trim System offers a premium solution for the neat finishing of junctions between flooring materials.

The solid brass profiles are available in six opulent metal finishes for use in prestigious applications where luxury floor finishes are installed, from hotels to top-end residential developments.

The profiles are available in either a ramp or a twin top configuration with a choice of bases and heights to suit a wide range of floorcoverings.

#### **Profile Information**

- Profiles suitable for interior use
- Tops clip in to bases to accommodate a variety of floorcoverings

#### **Installation Advice**

- Compressed thickness of carpet should always be a tight fit to the internal gauge of the combined top/base
- When installed with natural floorcoverings e.g. ceramics or wood, a suitable gap must be left between the profile base and the flooring to allow for natural expansion
- Bases should always be fitted on top of resilient floorcoverings when used in a ramp configuration
- Bases should be fitted using cartridge adhesive and screw fixings

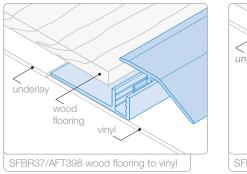
#### Colour

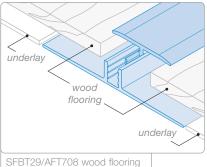
• For larger colour swatches see page 62

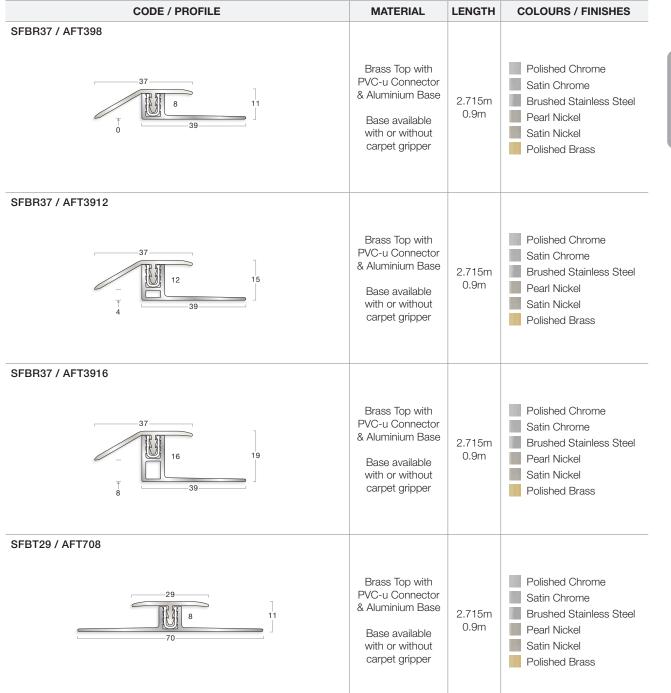
# Luxury Trim System



Visit: www.gradus.com to download: AutoCAD drawings, Gradus & NBS Specifications, Cleaning & Maintenance, Installation Guidelines and Health & Safety Data Sheets.

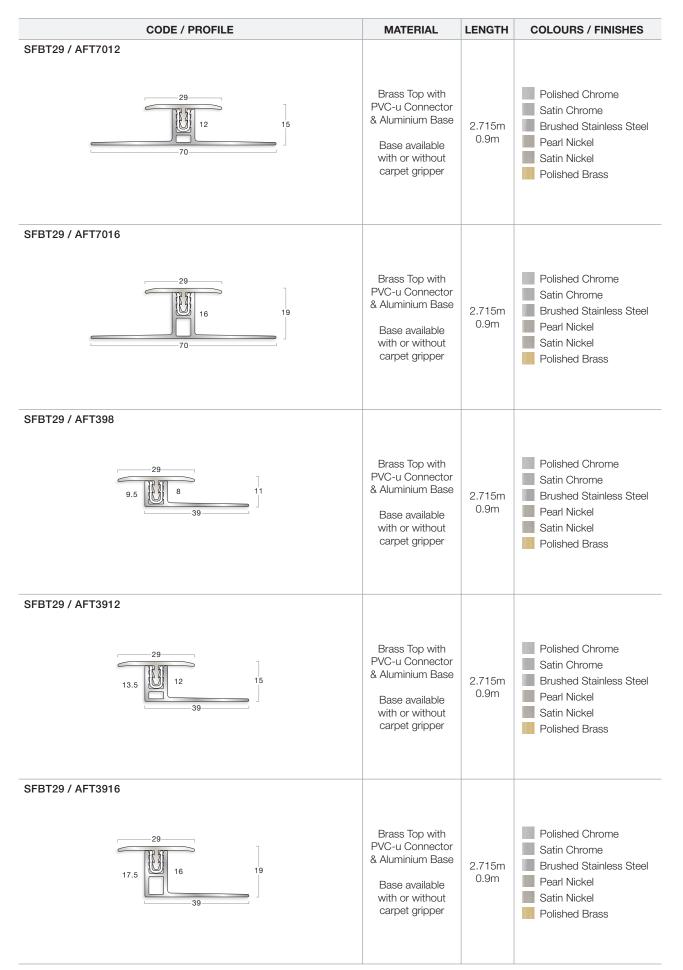






Section (

## Luxury Trim System



# MTS Multi-Trim System<sup>™</sup>



Edmund Sumner/View.

#### Description

MTS Multi-Trim System is a versatile and simple solution for common interfaces between flooring materials. Tops are aluminium or PVC-u and can be clipped into the bases at different heights to accommodate various floorcoverings, offering more flexibility in use.

MTS offers a neat finish to commonly found junctions in commercial applications, and is ideal for use with floorcoverings that require room for expansion such as wood, wood laminate, ceramics and terrazzo. Suitable for use in medium pedestrian and trolley traffic applications, e.g. high street shops, schools, hotels and offices.

#### **Profile Information**

- Profiles suitable for interior use
- Tops can be clipped into bases at variable heights to accommodate a wider range of floorcoverings

Denotes PVC-u profiles can be curved on-site, see individual profiles for minimum radius

#### **Installation Advice**

- Compressed thickness of carpet should always be a tight fit to the internal gauge of the combined top / base
- When installed with ceramics, wood or wood laminate flooring a suitable gap must be left between the profile base and the flooring to allow for natural expansion
- Bases should be fitted using cartridge adhesive and screw fixings

#### Colour

Ø

For larger colour swatches and LRV readings for MTS PVC-u see page 62

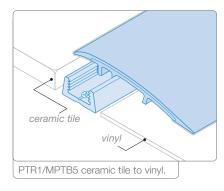


MTS PVC-u bases contain up to 100% recycled content.

# MTS Multi-Trim System<sup>™</sup> - PVC-u



Visit: www.gradus.com to download: AutoCAD drawings, Gradus & NBS Specifications, Cleaning & Maintenance, Installation Guidelines and Health & Safety Data Sheets.





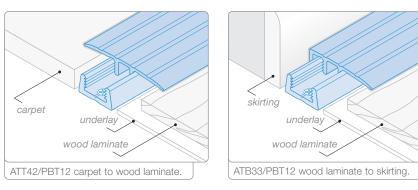
All Gradus products comply with REACH Regulation (EC) 1907-2006 - see page 6 for further details.

CODE / PROFILE	MATERIAL	LENGTH	COLOURS / FINISHES
PTT1 / MPTB5	PVC-u Top PVC-u Base	2.70m	Black Fawn Granite Dove Brown Clay Bluebell
PTT1 / MPTB12	PVC-u Top PVC-u Base	2.70m	Black Fawn Granite Dove Brown Clay Bluebell
PTT1 / MPTB16	PVC-u Top PVC-u Base	2.70m	Black Fawn Granite Dove Brown Clay Bluebell
PTR1 / MPTB5	PVC-u Top PVC-u Base	2.70m	Black Fawn Granite Dove Brown Clay Bluebell
PTR1 / MPTB12	PVC-u Top PVC-u Base	2.70m	<ul> <li>Black</li> <li>Granite</li> <li>Dove</li> <li>Brown</li> <li>Clay</li> <li>Bluebell</li> </ul>
PTR1 / MPTB16	PVC-u Top PVC-u Base	2.70m	<ul> <li>Black</li> <li>Granite</li> <li>Dove</li> <li>Brown</li> <li>Clay</li> <li>Bluebell</li> </ul>

## MTS Multi-Trim System<sup>™</sup> - Aluminium



Visit: www.gradus.com to download: AutoCAD drawings, Gradus & NBS Specifications, Cleaning & Maintenance, Installation Guidelines and Health & Safety Data Sheets.





# Clip-Top<sup>™</sup>



#### Description

Clip-Top is a two-piece product allowing design flexibility in commercial applications. The tops can be replaced so that the colour can be altered as part of a refurbishment programme, or if a worn or damaged section needs to be changed, without renewing the base or disrupting the fitted floorcovering. Suitable for use in heavy pedestrian and medium trolley traffic applications, e.g. department stores, high street shops, hospitals, schools, hotels and offices.



All Gradus products comply with REACH Regulation (EC) 1907-2006 - see page 6 for further details.

#### **Profile Information**

- Tops can be replaced
- Profiles suitable for interior use only



A number of PVC-u/metallic PVC-u tops and aluminium bases can be factory fabricated to a radius shape, subject to approval of template or detailed drawing (showing radius details), by the Technical Department

Details of minimum and maximum curving radii can be found on the opposite page.

#### Installation Advice

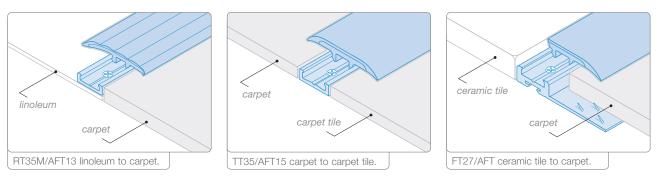
- Compressed thickness of carpet should always be a tight fit to the internal gauge of the combined top / base
- Clip-Top bases should always be fitted on top of the resilient floorcovering when used in a ramp configuration
- Bases should be fitted using cartridge adhesive and screw fixings

#### Colour

• For larger colour swatches and LRV readings see page 62



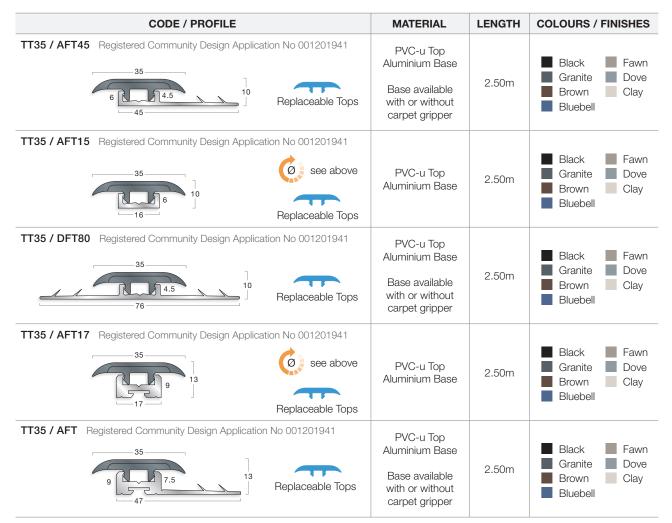
Visit: www.gradus.com to download: AutoCAD drawings, Gradus & NBS Specifications, Cleaning & Maintenance, Installation Guidelines and Health & Safety Data Sheets.



### Curving Clip-Top

Curves between the minimum and maximum radii can be factory fabricated subject to approval of template or detailed drawing (showing radius details) by the Technical Department. Curves greater than the maximum radius can be curved on-site or by Gradus on request. Curves less than the minimum radius cannot be curved.

Tops			Bases			Higher	CON	Lower
Profile	Min. Radius mm	Max. Radius mm	Profile	Min. Radius mm	Max. Radius mm	(carpet)	IVEX	(vinyl)
FT27	250	800	AFT12	250	6000		4	
RT35M	1000	3500	AFT13	250	6000			
RT42	1000	3500	AFT14	250	6000		4	
RT52	800	3500	AFT15	250	6000	Higher	AN	Lower
TT25M	500	800	AFT17	250	7000		NO.	(vinyl)
TT35	250	800	AFT28	600	9000		5	

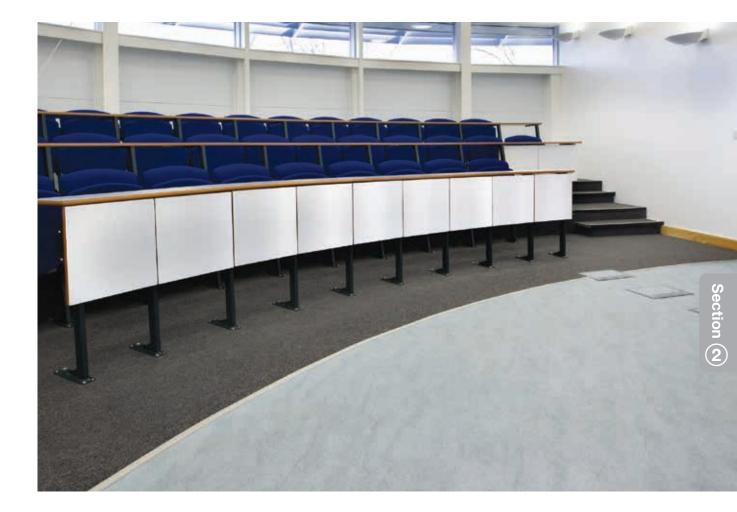


Dimensions shown are nominal. Illustrations are 70% size in mm. Products subject to minor design alterations without notice.

## Clip-Top<sup>™</sup>

CODE / PROFILE	MATERIAL	LENGTH	COLOURS / FINISHES
TT35 / DFT Registered Community Design Application No 00120	Aluminium Base	2.50m	Black Fawn Granite Dove Brown Clay Bluebell
TT25M / AFT14	page 71 Metallic PVC-u Top Aluminium Base	2.50m	<ul> <li>Burnt Almond</li> <li>Zinc</li> <li>Doubloon</li> <li>Platinum</li> <li>Silver</li> </ul>
TT25M / AFT12	page 71 Metallic PVC-u Top Aluminium Base	2.50m	<ul> <li>Burnt Almond</li> <li>Zinc</li> <li>Doubloon</li> <li>Platinum</li> <li>Silver</li> </ul>
RT42 / AFT28 Registered Community Design Application No 0013	page 71 PVC-u Top Aluminium Base	2.50m	Black Fawn Granite Dove Brown Clay Bluebell
RT52 / AFT28 Registered Community Design Application No 0012	page 71 PVC-u Top Aluminium Base	2.50m	Black Fawn Granite Dove Brown Clay Bluebell
RT35M / AFT13	page 71 Metallic PVC-u Top Aluminium Base able Tops	2.50m	<ul> <li>Burnt Almond</li> <li>Zinc</li> <li>Doubloon</li> <li>Platinum</li> <li>Silver</li> </ul>
FT27 / AFT15	page 71 PVC-u Top Aluminium Base able Tops	2.50m	Black Fawn Granite Dove Brown Clay Bluebell
FT27 / AFT45	PVC-u Top Aluminium Base able Tops Base available with or without carpet gripper	2.50m	Black Fawn Granite Dove Brown Clay Bluebell
FT27 / AFT17	page 71 PVC-u Top Aluminium Base able Tops	2.50m	Black Fawn Granite Dove Brown Clay Bluebell
FT27 / AFT	PVC-u Top Aluminium Base able Tops Base available with or without carpet gripper	2.50m	Black Fawn Granite Dove Brown Clay Bluebell

## Clip-Top fx®



#### Description

Clip-Top fx is a two-piece product allowing design flexibility in most commercial applications. Tops are PVC-u and bases are PVC-u for curves and aluminium for straights. The product can be easily formed on site without the need for heat application, reducing the requirements for pre-fabricated curves. The tops can be replaced so that the colour can be altered as part of a refurbishment programme, or if a worn or damaged section needs to be changed, without renewing the base or disrupting the fitted floorcovering. Suitable for use in medium pedestrian and trolley traffic applications, e.g. high street shops, schools, hotels and offices.

#### **Profile information**

- Tops can be replaced
- Profiles suitable for interior use only

Can be easily formed on site without the need for heat application when used with PVC-u bases. See individual profiles for curving radii.

#### Installation Advice

- Compressed thickness of carpet should always be a tight fit to the internal gauge of the combined top / base
- Clip-Top fx bases should always be fitted on top of the resilient floorcovering when used in a ramp configuration
- Bases should be fitted using cartridge adhesive and screw fixings

#### Colour

• For larger colour swatches and LRV readings see page 62

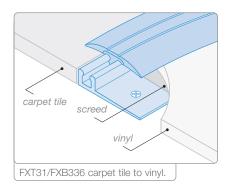
Clip-Top fx PVC-u bases contain up to 100% recycled content.

 Clip-Top fx<sup>®</sup> Registered Community Design No 000007067-001 – 000007067-003

## Clip-Top fx®



Visit: www.gradus.com to download: AutoCAD drawings, Gradus & NBS Specifications, Cleaning & Maintenance, Installation Guidelines and Health & Safety Data Sheets.





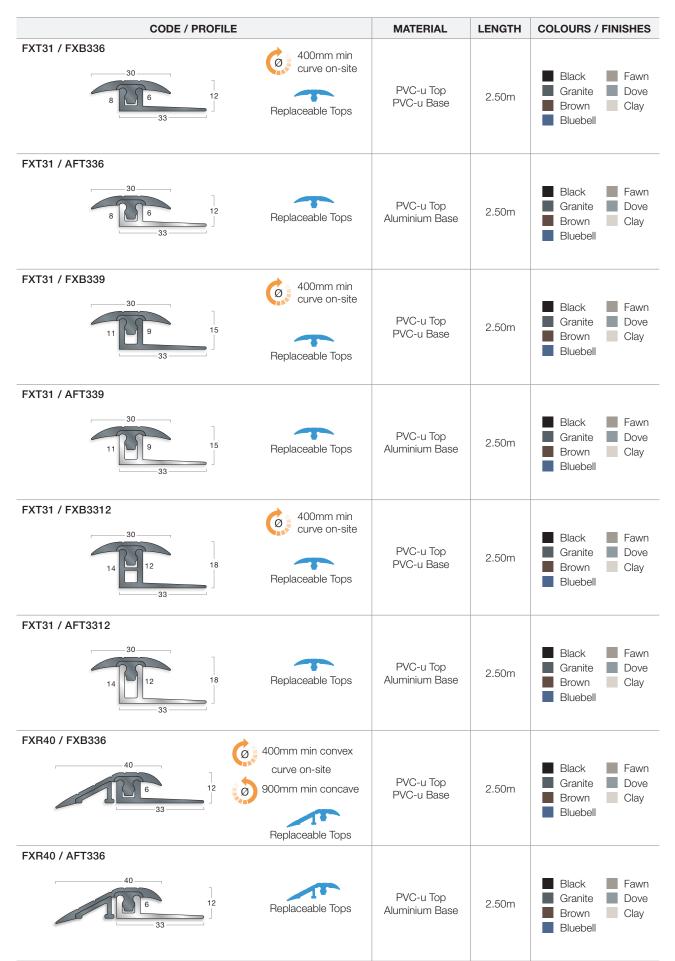
PVC-u bases are pre-punched with tabs and fixing holes for on-site curving. Latex screed should be used with resilient floorcoverings to prevent pre-punched base shadowing through.



Aluminium bases have a solid flange for straight lengths.

CODE / PROFILE		MATERIAL	LENGTH	COLOURS / FINISHES
FXT21 / FXB336	400mm min curve on-site Replaceable Tops	PVC-u Top PVC-u Base	2.50m	Black Fawn Granite Dove Brown Clay Bluebell
FXT21 / AFT336	Replaceable Tops	PVC-u Top Aluminium Base	2.50m	Black Fawn Granite Dove Brown Clay Bluebell
FXT21 / FXB339	400mm min curve on-site Replaceable Tops	PVC-u Top PVC-u Base	2.50m	Black Fawn Granite Dove Brown Clay Bluebell
FXT21 / AFT339	Replaceable Tops	PVC-u Top Aluminium Base	2.50m	Black Fawn Granite Dove Brown Clay Bluebell
FXT21 / FXB3312	400mm min curve on-site Replaceable Tops	PVC-u Top PVC-u Base	2.50m	Black Fawn Granite Dove Brown Clay Bluebell
FXT21 / AFT3312	Replaceable Tops	PVC-u Top Aluminium Base	2.50m	<ul> <li>Black</li> <li>Granite</li> <li>Dove</li> <li>Brown</li> <li>Clay</li> <li>Bluebell</li> </ul>

## Clip-Top fx®



Dimensions shown are nominal. Illustrations are 70% size in mm. Products subject to minor design alterations without notice.

Section (N

# **Design-Clip**



#### Description

Design-Clip comprises two-piece aluminium profiles that provide a neat finish at junctions between hard floors such as luxury vinyl tile, wood and wood laminate. The profiles allow room for expansion in natural floorcoverings.

#### **Profile Information**

- Profiles suitable for interior use in medium traffic applications e.g. restaurants, hotels and offices.
- Tops are clipped into bases at variable heights to accommodate a variety of floorcoverings.
- Bases are supplied pre-drilled with countersunk holes for no.4 screws.

#### **Installation Advice**

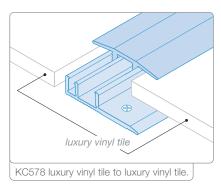
- Bases should be fitted using cartridge adhesive and screw fixings.
- When installed with floorcoverings that require room for natural expansion, a suitable gap must be left between the profile base and the floorcovering to allow for that expansion.

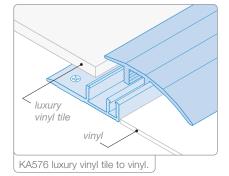
#### Colour

• For larger colour swatches see page 62



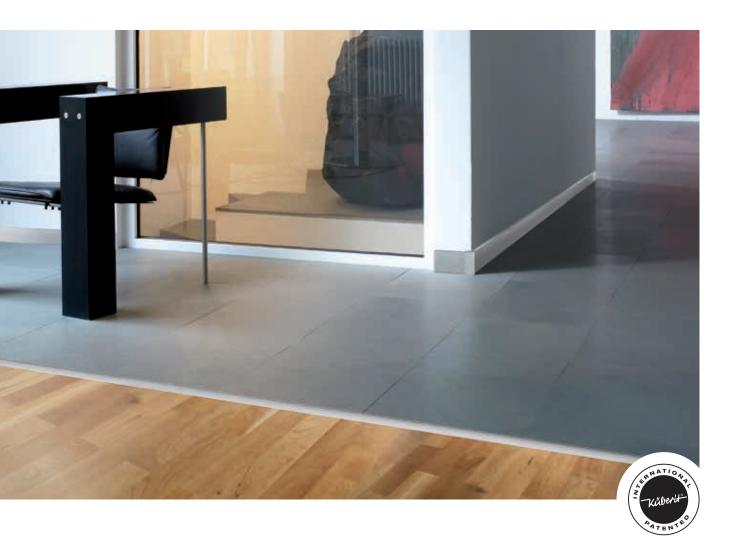
Visit: www.gradus.com to download: AutoCAD drawings, Gradus & NBS Specifications, Cleaning & Maintenance, Installation Guidelines and Health & Safety Data Sheets.





	CODE / PROFILE		MATERIAL	LENGTH	COLOURS / FINISHES
KA576	4-7 ↓ ↓ 0-3	Self-levelling	Aluminium Top Aluminium Base	2.70m	F4 Silver Anodised
KC578	4-7 ↓ 24 27 27 27	Self-levelling	Aluminium Top Aluminium Base	2.70m	F4 Silver Anodised
NEW KB57	7 4-7 1 4-7 1 27	Self-levelling	Aluminium Top Aluminium Base	2.70m	F4 Silver Anodised

# **PPS<sup>®</sup> System**



#### Description

The PPS range comprises two-piece anodised aluminium profiles that provide solutions to junctions for flooring such as wood, wood laminate and ceramic tiles. The PPS system utilises aluminium bases and tops joined together with a unique patented linking screw which allows the profiles to accommodate various heights of floorcoverings. The profiles allow room for expansion of natural floorcoverings such as wood whilst offering greater flexibility in height options.

#### **Profile Information**

- Profiles suitable for interior use in medium traffic applications, e.g. offices and restaurants
- Tops are screwed into bases at adjustable heights to accommodate a variety of floorcoverings

#### **Installation Advice**

- Bases should be fitted using cartridge adhesive and screw fixings
- When installed with floorcoverings that require room for natural expansion, a suitable gap must be left between the profile base and the floorcovering to allow for that expansion

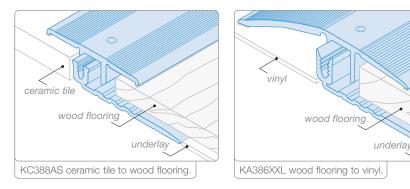
#### Colour

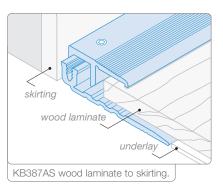
• For larger colour swatches see page 62

## **PPS<sup>®</sup> System**



Visit: www.gradus.com to download: AutoCAD drawings, Gradus & NBS Specifications, Cleaning & Maintenance, Installation Guidelines and Health & Safety Data Sheets.





	CODE / PROFILE		MATERIAL	LENGTH	COLOURS / FINISHES
KC388AS	T10 Torx <sup>™</sup> Screw	1 Adjustable height	Aluminium Top Aluminium Base	2.70m	F4 Silver Anodised F5 Gold Anodised
KC388XXL	(C) T15 Torx <sup>™</sup> Screw	1 Adjustable height	Aluminium Top Aluminium Base	2.70m	F4 Silver Anodised F5 Gold Anodised
KA386AS	C T10 Torx™ Screw 44 ↓1-5	, 1 Adjustable height	Aluminium Top Aluminium Base	2.70m	F4 Silver Anodised F5 Gold Anodised
KA386XXL	€ T15 Torx <sup>™</sup> Screw	t Adjustable height Ĵ 0-9	Aluminium Top Aluminium Base	2.70m	F4 Silver Anodised F5 Gold Anodised
KB387AS	C T10 Torx™ Screw 22- 10-14	t Adjustable height	Aluminium Top Aluminium Base	2.70m	F4 Silver Anodised F5 Gold Anodised
KB387XXL 7-16 1 40	(2) T15 Torx™ Screw 33 12-21	1 Adjustable height	Aluminium Top Aluminium Base	2.70m	F4 Silver Anodised F5 Gold Anodised

# Euro-Clip<sup>™</sup> System



#### Description

Euro-Clip is a range of two-piece wood-effect profiles for use with wood and wood laminates. The profiles allow room for expansion in natural floorcoverings.

#### **Profile Information**

- Profiles suitable for interior use in medium traffic applications, e.g. offices and restaurants
- Tops are clipped in to bases at variable heights to accommodate a variety of floorcoverings

#### **Installation Advice**

- Bases should be fitted using cartridge adhesive and screw fixings
- When installed with floorcoverings that require room for natural expansion, a suitable gap must be left between the profile base and the floorcovering to allow for that expansion

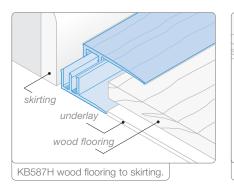
#### Colour

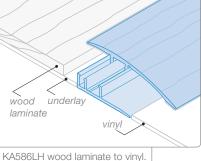
• For larger colour swatches see page 62

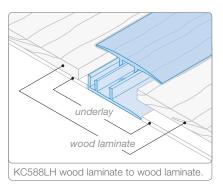
## Euro-Clip<sup>™</sup> System

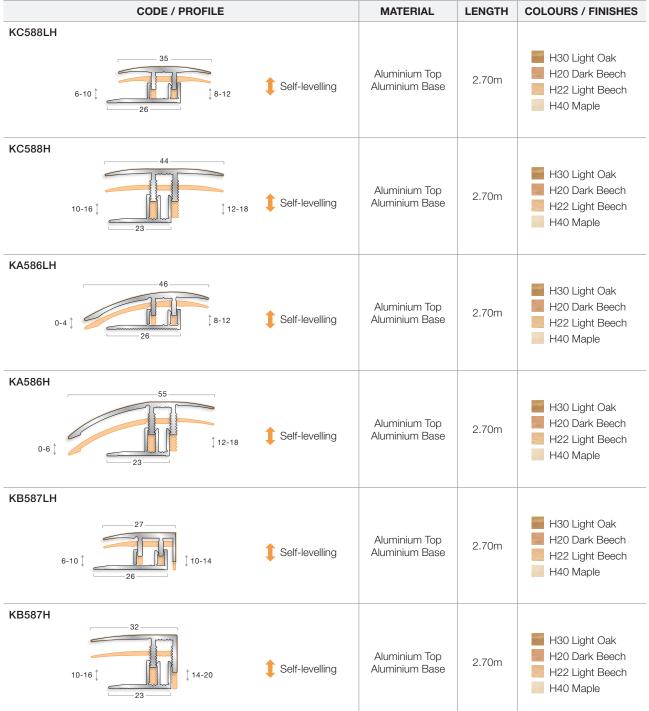


Visit: www.gradus.com to download: AutoCAD drawings, Gradus & NBS Specifications, Cleaning & Maintenance, Installation Guidelines and Health & Safety Data Sheets.









## Trans-Edge<sup>®</sup> - Trims



#### Description

Trans-Edge trims have been designed for use in the most demanding environments where frequent heavy foot and wheeled traffic can be expected, e.g. railway stations, airports, transport interchanges, department stores and hospitals. Trans-Edge trims comprise an aluminium base channel with a choice of slip-resistant Elite inserts (ordered separately). Standard interior insert is available for interior dry conditions. Xtra-grip insert is available for interior areas that are at risk of becoming wet and therefore pose a higher risk of slip.



All Gradus products comply with REACH Regulation (EC) 1907-2006 - see page 6 for further details.

#### **Profile Information**

- Profiles suitable for interior use
- Choice of ramp or flat design

#### **Installation Advice**

- Aluminium channels are fixed using screws and cartridge adhesive. Elite insert is then fitted into channel to allow concealed fixings
- If used with carpet, compressed thickness of carpet should always be a tight fit to the internal gauge of the profile
- When installed with ceramics, wood or wood laminate flooring a suitable gap must be left between the profile and the flooring to allow for natural expansion
- Ramp profiles should always be fitted on top of resilient floorcoverings

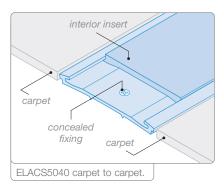
#### Colour

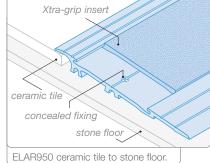
• For larger colour swatches and LRV's see page 17

## Trans-Edge<sup>®</sup> - Trims



Visit: www.gradus.com to download: AutoCAD drawings, Gradus & NBS Specifications, Cleaning & Maintenance, Installation Guidelines and Health & Safety Data Sheets.

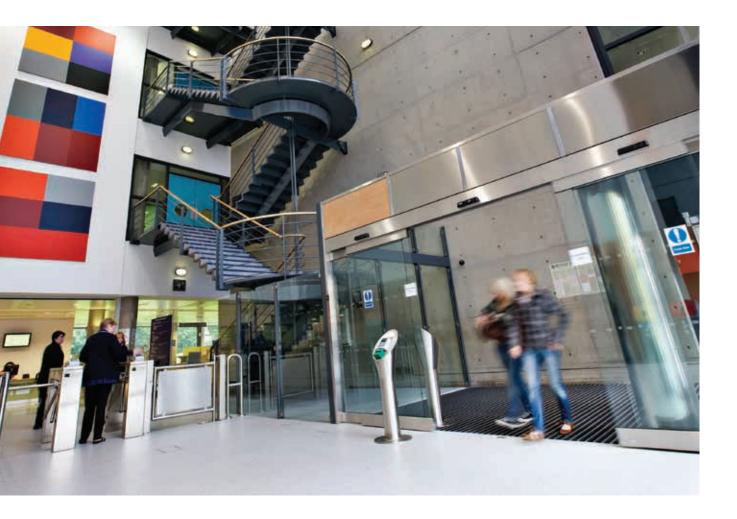




Elite Insert supplied separately to channel	Coil Length
ELINS30 - Interior	15m coil
ELINS40 - Interior	25m coil
ELINS50 - Interior	25m coil
ELINSXG30 - Xtra-grip	15m coil
ELINSXG50 - Xtra-grip	15m coil

	CODE / PROFILE	MATERIAL	LENGTH	COLOURS / FINISHES
ELACS5040	了 no.6	Aluminium	2.50m	
4[	50	PVC-u Insert (ELINS40)	See chart above	Elite Xtra-grip Insert ELINSXG
ELAR530	了了 no.6	Aluminium	2.50m	All ELAR profiles
	54 T +-10	PVC-u Insert (ELINS30 or ELINSXG30)	See chart above	Onyx Graphite Quarry Ochre
ELAR830	∑7 no.6	Aluminium	2.50m	Elite Interior Insert
	65 − 5.5 ⊢11	PVC-u Insert (ELINS30 or ELINSXG30)	See chart above	ELINS All ELAR & ELACS profiles
ELAR950	٦٢ no.6	Aluminium	2.50m	Jet Coffee
		PVC-u Insert (ELINS50 or ELINSXG50)	See chart above	Lead Steel Snowdrift
ELAR1250	\] no.6	Aluminium	2.50m	ELACS5040 ELAR950 ELAR1250
		PVC-u Insert (ELINS50 or ELINSXG50)	See chart above	ELAR1550 also available with Ink Burgundy
ELAR1550	۲۲ no.6	Aluminium	2.50m	Midnight Evergreen
	90 13 → 15	PVC-u Insert (ELINS50 or ELINSXG50)	See chart above	Ocean Poppy Cloud Linen
ELAR1830	7 no.6	Aluminium	2.50m	Glacier Canvas Buttercup
		PVC-u Insert (ELINS30 or ELINSXG30)	See chart above	For larger colour swatches and LRV's see page 17

## **Matwell Frames**



#### Description

Matwell frames are available in two options: recessed – for the creation, protection and finishing of a recess in the subfloor that is used to accommodate a primary barrier mat; ramped – for the creation of a surface matwell to secure and provide safe transition for a mat that is laid directly on top of the floor.

#### **Profile Information**

- UMFA and FRB profiles can be pre-drilled (upon request) and are available in a variety of heights to suit different gauges of barrier matting
- Ramping frames are suitable for use with 12mm primary barrier mats (not suitable in areas subject to heavy trolley traffic)
- Frames can be mitred or shaped subject to provision and approval of template

#### **Installation Advice**

- Recessed frames should be mechanically fixed to the subfloor prior to the screed or plywood build up of the matwell base to suit the matting to be installed. Frames should be fixed to the correct levels taking into account the finished floor level and surrounding floor finish
- Ramped frames aluminium ramps should be fixed using cartridge adhesive and screw fixings; pvc ramps are fixed with contact adhesive only
- Connectors are available for the FRB frame for secure fixing of corners

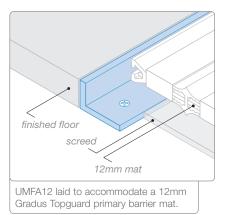
#### Colour

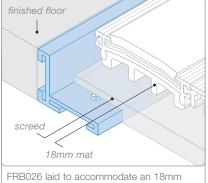
• For larger colour swatches see page 62

### **Matwell Frames**

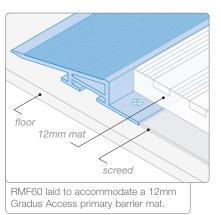


Visit: www.gradus.com to download: AutoCAD drawings, Gradus & NBS Specifications, Cleaning & Maintenance, Installation Guidelines and Health & Safety Data Sheets.





Gradus Esplanade Plus primary barrier mat.



	CODE / PROFILE	MATERIAL	LENGTH	COLOURS / FINISHES
UMFA12	$\begin{bmatrix} 3 & 17 & \text{no.6} \\ 12 & 18 \\ & & & 3 \end{bmatrix}$	Aluminium	2.00m	Natural
UMFA18	$\begin{bmatrix} 3 & \text{Y7 no.6} \\ 18 \\ 12 \\ 15 \end{bmatrix} = \begin{bmatrix} 3 \\ 12 \\ 3 \\ 15 \end{bmatrix}$	Aluminium	2.00m	Natural
UMFA25	<sup>3</sup> 28 25 18 21 3	Aluminium	2.00m	Natural
FRB026	6 20 20 25 6 31	Brass	2.50m	Natural
RMF60		Aluminium	3.00m	Natural
RAM012	12 9.5 50 69	рус	2.50m	Black Grey

## **Specialist Floor Trims**



#### Description

The following pages offer a wide selection of specialist floor trims that provide various solutions to common problems encountered where different floorcoverings are used together. Diagrams are shown adjacent to each product family to illustrate how each particular group of profiles is commonly used.

#### Colour

• For larger colour swatches see page 62

#### **Bending Machine**

Ø

- Many of the Gradus Trims in this section can easily be curved by hand, however some trims require a bending machine.
- To rent, buy or for more information about bending machines please contact Technical Support on 01625 428922.



🍃 Can be curved by hand.

Ø Bending machine required.

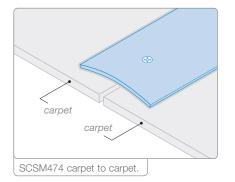
#### Contents

•	Cover Strips	87 - 90
•	Expansion Joint Covers	91
•	Joint Trims	92
•	Finishing Trims	93
•	Nap Trims	94
•	Edge Trims	95
•	Multi-Purpose Trims	96 - 103
•	Aluminium Cove Formers	104
•	Feather Edges	105
•	Heavy Duty Ramp	105
•	Ramp Edges	106 - 107
•	Construction Joint Covers	108
•	Floor Repair Trim	108
•	Bevelled Underlay	109
•	Dual Trim	109
•	Transition T Profiles	110
•	Threshold Trims	111
•	Square Edge Trims	112 - 113
•	Movement Joints	114 - 115
•	Wetroom Transition Strips	116
•	Feature Strip	117
•	Contour Edge	117

Used to join floorcoverings of the same or similar heights. Provide safe, neat joining solutions whilst protecting the edge of the floorcoverings from damage. Often used at door thresholds where floorcoverings meet. AJC profiles are side drilled and are ideal for use as expansion joint covers.



Visit: www.gradus.com to download: AutoCAD drawings, Gradus & NBS Specifications, Cleaning & Maintenance, Installation Guidelines and Health & Safety Data Sheets.

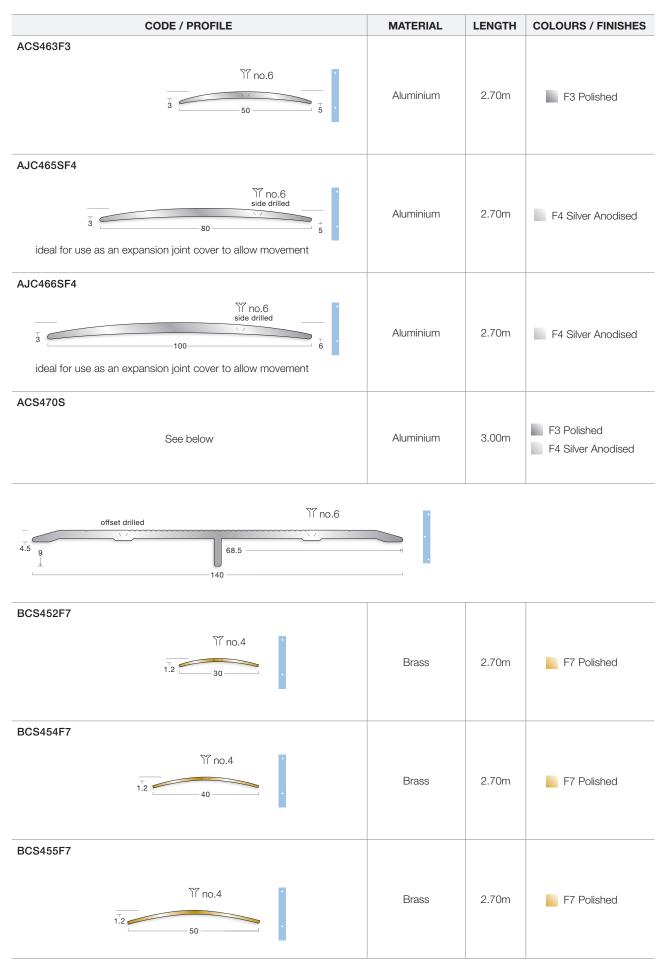




LENGTH **COLOURS / FINISHES CODE / PROFILE** MATERIAL SCSM471 ۲ั no.4 Stainless Steel 2.70m F8G Matt 20 SCSP471 \î7 no.4 2.70m Stainless Steel F8 Polished 20 SCS471SF8G ኘ7 no.4 side drilled Stainless Steel 2.70m F8G Matt SCS471SF8 እኛ no.4 side drilled Stainless Steel 2.70m F8 Polished 20 SCSM451 \î7 no.4 Stainless Steel 2.70m F8G Matt 30

	CODE / PROFILE	MATERIAL	LENGTH	COLOURS / FINISHES
SCSP451				
	Ϋ́ no.4	Stainless Steel	2.70m	F8 Polished
SCS451SF8G				
	$\frac{1}{1} \underbrace{\frac{1}{30}}_{30} \underbrace{\frac{1}{30}}_{$	Stainless Steel	2.70m	F8G Matt
SCS451SF8				
	$\frac{1}{1} \frac{1}{30} $	Stainless Steel	2.70m	F8 Polished
SCSM454				
	Ϋ́ no.4	Stainless Steel	2.70m	F8G Matt
SCSP454				
	Ϋ́ no.4 140	Stainless Steel	2.70m	F8 Polished
SCS454SF8G				
	$\frac{1}{40}$	Stainless Steel	2.70m	F8G Matt
SCS454SF8				
	Side drilled     1	Stainless Steel	2.70m	F8 Polished
SCSM455				
	۲̈́? no.4	Stainless Steel	2.70m	F8G Matt
SCSP455				
	Ϋ́ no.4	Stainless Steel	2.70m	F8 Polished

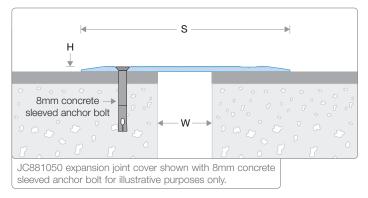




## **Expansion Joint Covers**

#### **Profile Information**

- Bevelled edges and serrated finish provide slip-resistance for pedestrian safety
- Economical solution for retrofit and surface mount installations between level surfaces
- Mill finish aluminium supplied in 3m lengths, pre-drilled with countersunk holes



		w	н	S	Р	MOVEMENT +/-
APPLICATION	PROFILE	Nominal Joint Width mm	Frame Height mm	Sightline mm	Point Load * kg	Horizontal ** mm
Floor to Floor	JC881025	up to 25mm	4.3mm	128mm	250kg	30%
Floor to Floor	JC881050	up to 50mm	4.3mm	168mm	250kg	30%

\* Achieved using a 25mm diameter surface. \*\* Figure calculated for maximum nominal width only.

Dimensions shown are nominal. Illustrations are 70% size in mm. Products subject to minor design alterations without notice.

#### JC881025



#### JC881050

168	4.3
100	' +

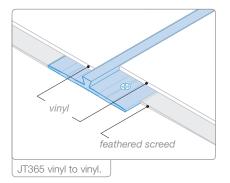


## **Joint Trims**

For use with floorcoverings of the same height. Allows joints to be neatly finished.



Visit: www.gradus.com to download: AutoCAD drawings, Gradus & NBS Specifications, Cleaning & Maintenance, Installation Guidelines and Health & Safety Data Sheets.





Pre-punched with tabs and fixing holes for on-site curving.

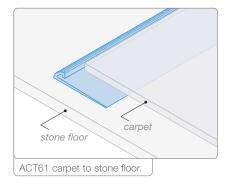
Solid base with countersunk holes for straights.

	CODE / PROFILE		MATERIAL	LENGTH	COLOURS / FINISHES
JT365	3 17 no.4 -4 1 1 		Aluminium	3.00m	F3 Polished F4 Silver Anodised
JT365EBF4		<b>400mm</b>	Aluminium	3.00m	F4 Silver Anodised
JT366	$7 \neg \frac{4}{2}$ $17 \text{ no.4}$ $36 \rightarrow 6$		Aluminium	2.70m	F3 Polished F4 Silver Anodised
JT366EBF4		<b>6</b> 400mm	Aluminium	2.70m	F4 Silver Anodised

## **Finishing Trims**

Used to form a neat and clean finish to the edge of a floorcovering where it either finishes or meets another floorcovering. Protects the edge of floorcoverings, prevents damage and ensures that the floorcovering does not lift and become a trip hazard.

Visit: www.gradus.com to download: AutoCAD drawings, Gradus & NBS Specifications, Cleaning & Maintenance, Installation Guidelines and Health & Safety Data Sheets.



Key Pre-punched and fixing he on-site curvi

Pre-punched with tabs and fixing holes for on-site curving.

Solid base for straights.

. .....

1

Solid base with countersunk holes for straights.

Section (2)

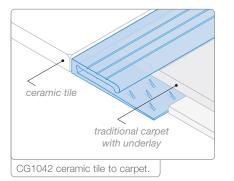
	CODE / PROFILE		MATERIAL	LENGTH	<b>COLOURS / FINISHES</b>
ACT61			Aluminium	2.50m	Mill Finish
ACT81			Aluminium	2.50m	Mill Finish
ET356	2.5 ℃ no.4 3.5[ <u>2+</u> 		Aluminium	2.50m	F3 Polished F4 Silver Anodised
ET356EBF4	2.5 3.5[ <u></u> 18	6 400mm 800mm	Aluminium	2.50m	F4 Silver Anodised
ET359	<sup>5</sup> Ìĩ no.4 6 18		Aluminium	2.50m	F3 Polished F4 Silver Anodised
ET359EBF4		6 400mm 800mm	Aluminium	2.50m	F4 Silver Anodised

## Nap Trims

Used to provide a neat edge or join between carpet and other types of floorcovering such as resilient flooring or ceramics. Certain nap trims (ANT355, CG1042 & BCT16) are also commonly used as 'binder' bars in conjunction with a stair edging (see page 59 for more details).



Visit: www.gradus.com to download: AutoCAD drawings, Gradus & NBS Specifications, Cleaning & Maintenance, Installation Guidelines and Health & Safety Data Sheets.





Solid base for straights.



All Gradus products comply with REACH Regulation (EC) 1907-2006 - see page 6 for further details.

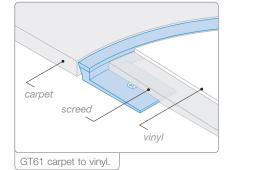
	CODE / PROFILE	MATERIAL	LENGTH	COLOURS / FINISHES
ANT27		Aluminium	2.44m 2.75m 3.20m	Mill Finish
ANT355	5	Aluminium Available with or without carpet gripper	2.44m 2.75m 3.20m	Mill Finish
CG1042	8 44	Aluminium Available with or without carpet gripper	2.44m 2.75m 3.20m	Mill Finish
BCT16	6	Bronze Available with or without carpet gripper	2.50m 2.75m 3.20m	Polished
BCT18		Bronze Available with or without carpet gripper	2.50m 2.75m 3.20m	Polished

## **Edge Trims**

Used to edge floorcoverings and to provide a neat join between floorcoverings such as carpet, carpet tiles, wood laminate and resilient floorcoverings. TA8 is also ideal as a day joint profile for resin floors as it is suitable for on-site polishing and finishing.



Visit: www.gradus.com to download: AutoCAD drawings, Gradus & NBS Specifications, Cleaning & Maintenance, Installation Guidelines and Health & Safety Data Sheets.





th tabs So for fo

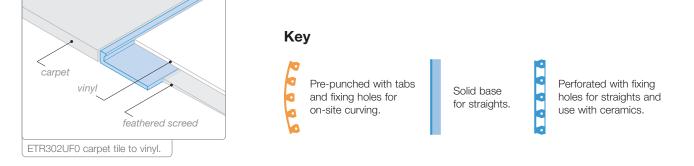
Solid base for straights. Solid base with countersunk holes for straights.

	CODE / PROFILE	MATERIAL	LENGTH	COLOURS / FINISHES
TA6		Aluminium	2.75m	Mill Finish
TA8		Aluminium	3.00m	Mill Finish
ET367	2.5 6 2.5 36	Aluminium	2.70m	F3 Polished F4 Silver Anodised
GT61M	8 6 800mm	Pvc Top PVC-u Base	2.50m	<ul> <li>Burnt Almond</li> <li>Zinc</li> <li>Doubloon</li> <li>Platinum</li> <li>Silver</li> </ul>
GT61R	8 5 800mm	Pvc Top PVC-u Base	2.50m	<ul> <li>Black</li> <li>Brown</li> <li>Granite</li> <li>Bluebell</li> <li>Dove</li> <li>Clay</li> </ul>
PET276	wp to 25% recycled content.	Pvc Top PVC-u Base	2.50m	<ul><li>Black</li><li>Brown</li><li>Granite</li><li>Dove</li></ul>

A range of profiles used to join and edge a variety of floorcoverings of heights from 2mm to 23.5mm. Three options available: pre-punched with tabs and fixing holes for on-site curving; solid base for straights; and perforated with fixing holes for straights and for use with ceramics. Can be used as a recessed matwell frame.

R

Visit: www.gradus.com to download: AutoCAD drawings, Gradus & NBS Specifications, Cleaning & Maintenance, Installation Guidelines and Health & Safety Data Sheets.



	CODE / PROFILE	MATERIAL	LENGTH	COLOURS / FINISHES
ETR299F0	3.5 2 21	Aluminium	2.50m	F0 Natural
ETR299UF0	3.5 2 21	Aluminium	2.50m	F0 Natural
ETR299GF0	3.5 21 21 21 21 21 21 21 21	Aluminium	2.50m	F0 Natural
NEW ETR300F0	4 2.5 4 2.5 21	Aluminium	2.50m	F0 Natural
NEW ETR300UF0	4 2.5 4 21	Aluminium	2.50m	F0 Natural

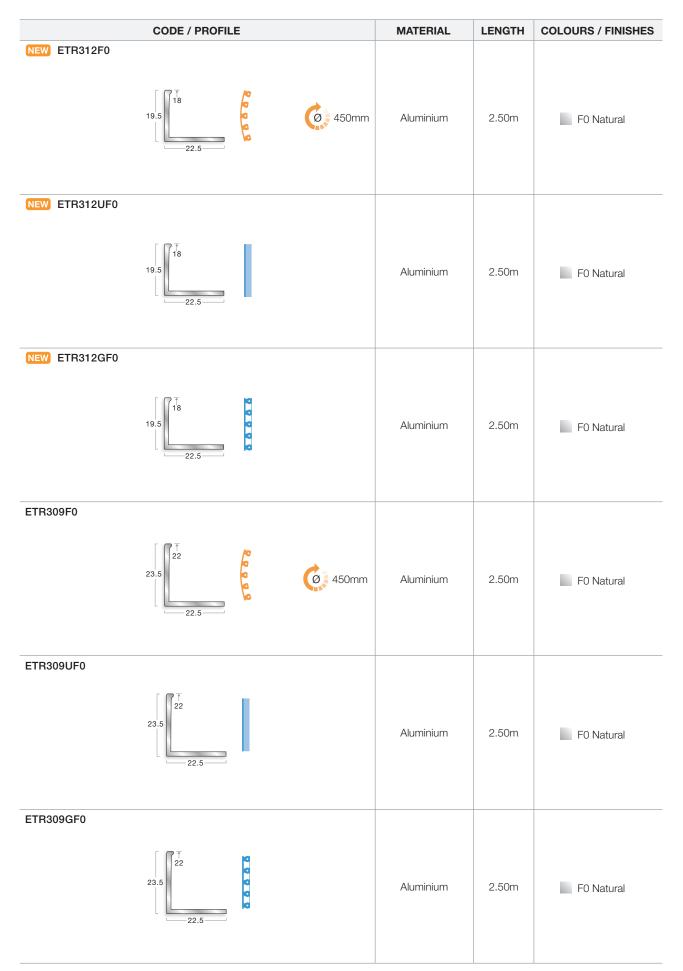
	CODE / PROFILE	MATERIAL	LENGTH	COLOURS / FINISHES
NEW ETR300GF0	2.5 4 ∠21	Aluminium	2.50m	F0 Natural
ETR301F0	4.5 21	n Aluminium	2.50m	F0 Natural
ETR301UF0	4.5 <u>21</u>	Aluminium	2.50m	F0 Natural
ETR301GF0	4.5 <u>21</u>	Aluminium	2.50m	F0 Natural
ETR302F0	6 220mr	n Aluminium	2.50m	F0 Natural
ETR302UF0	6 <u>↓</u> 21	Aluminium	2.50m	F0 Natural
ETR302GF0		Aluminium	2.50m	F0 Natural
ETR307F0	7.5 220mr	n Aluminium	2.50m	F0 Natural

Dimensions shown are nominal. Illustrations are 70% size in mm. Products subject to minor design alterations without notice. Symbol key - page 96.

Section (N

	CODE / PROFILE	MATERIAL	LENGTH	COLOURS / FINISHES
ETR307UF0				
	7.5 22.5	Aluminium	2.50m	F0 Natural
ETR307GF0				
	7.5 <u> </u>	Aluminium	2.50m	F0 Natural
ETR303F0				
	9.5 240mm	Aluminium	2.50m	F0 Natural
ETR303UF0				
	9.5 ± 22.5 ±	Aluminium	2.50m	F0 Natural
ETR303GF0				
	9.5	Aluminium	2.50m	F0 Natural
ETR304F0				
	10.5 12 22.5 240mm	Aluminium	2.50m	F0 Natural
ETR304UF0				
		Aluminium	2.50m	F0 Natural

	CODE / PROFILE		MATERIAL	LENGTH	COLOURS / FINISHES
ETR304GF0			Aluminium	2.50m	F0 Natural
ETR305F0		240mm	Aluminium	2.50m	F0 Natural
ETR305UF0			Aluminium	2.50m	F0 Natural
ETR305GF0			Aluminium	2.50m	F0 Natural
ETR306F0		Ø 450mm	Aluminium	2.50m	F0 Natural
ETR306UF0			Aluminium	2.50m	F0 Natural
ETR306GF0			Aluminium	2.50m	F0 Natural



	CODE / PROFILE	MATERIAL	LENGTH	COLOURS / FINISHES
ETR301F7	4.5 200mm	Brass	2.50m	F7 Polished
ETR301GF7	4.5 21	Brass	2.50m	F7 Polished
ETR302F7	4.5 6 21	Brass	2.50m	F7 Polished
ETR302GF7		Brass	2.50m	F7 Polished
ETR307F7	7.5 22.5 220mm	Brass	2.50m	F7 Polished
ETR307GF7	7.5	Brass	2.50m	F7 Polished
ETR303F7	9.5 240mm	Brass	2.50m	F7 Polished
ETR303GF7	9.5	Brass	2.50m	F7 Polished

	CODE / PROFILE	MATERIAL	LENGTH	COLOURS / FINISHES
ETR304F7	10.5 12 22.5 400mm	Brass	2.50m	F7 Polished
ETR304GF7		Brass	2.50m	F7 Polished
ETR305F7	14 12.5 22.5 400mm	Brass	2.50m	F7 Polished
ETR305GF7		Brass	2.50m	F7 Polished
ETR306F7	16.5 22.5	Brass	2.50m	F7 Polished
ETR306GF7		Brass	2.50m	F7 Polished
ETR309F7	23.5	Brass	2.50m	F7 Polished
ETR309GF7		Brass	2.50m	F7 Polished



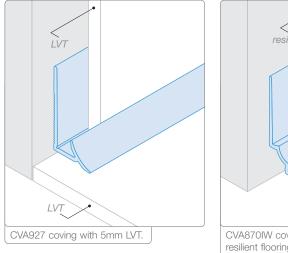
▲ Note there is a +/- 0.5mm tolerance on the height of stainless steel multi-purpose trims.

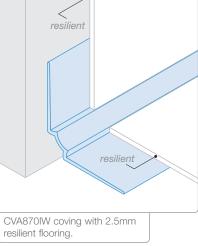
## **Aluminium Cove Formers**

Coving solutions for resilient and LVT flooring to create a neat finish where the floor meets the wall.



Visit: www.gradus.com to download: AutoCAD drawings, Gradus & NBS Specifications, Cleaning & Maintenance, Installation Guidelines and Health & Safety Data Sheets.





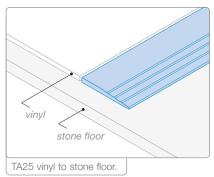
CODE / PROFILE	MATERIAL	LENGTH	COLOURS / FINISHES
27       -5       7         1       -5       7	Aluminium	2.50m	F4 Silver Anodised
CVA870IW	Aluminium	2.50m	<ul> <li>F4 Silver Anodised</li> <li>F6 Bronze Anodised</li> <li>F9 Sand Anodised</li> </ul>

## **Feather Edges**

Used to finish the raw exposed edge of resilient floorcoverings. Typically used at the junction with terrazzo or stone floors.



All Gradus products comply with REACH Regulation (EC) 1907-2006 - see page 6 for further details.



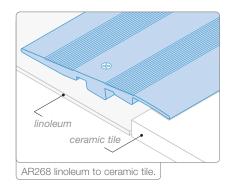


Visit: www.gradus.com to download: AutoCAD drawings, Gradus & NBS Specifications, Cleaning & Maintenance, Installation Guidelines and Health & Safety Data Sheets.

	CODE / PROFILE	MATERIAL	LENGTH	<b>COLOURS / FINISHES</b>
TA25	2.5	Aluminium	2.50m	Mill Finish
T200	226	pvc	15m coil	<ul><li>Black</li><li>Brown</li><li>Granite</li><li>Dove</li></ul>
T250	2.5	рус	15m coil	<ul><li>Black</li><li>Brown</li><li>Granite</li><li>Dove</li></ul>
T300	327	рус	15m coil	<ul><li>Black</li><li>Brown</li><li>Granite</li><li>Dove</li></ul>

## **Heavy-Duty Ramp**

Used to provide a transition for floorcoverings with a height of between 8.5mm and 15mm. 8.5mm to 13mm - suitable for heavy wheeled traffic. 13mm to 15mm - suitable for light wheeled traffic, e.g. wheelchairs and pushchairs. Supplied pre-drilled with countersunk holes.





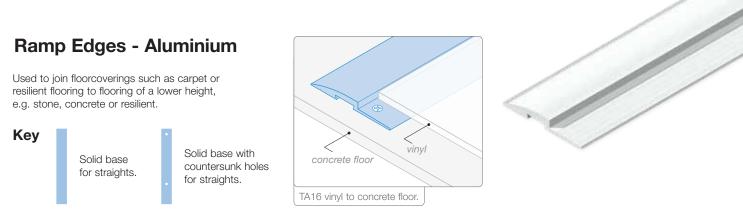
Visit: www.gradus.com to download: AutoCAD drawings, Gradus & NBS Specifications, Cleaning & Maintenance, Installation Guidelines and Health & Safety Data Sheets.

CODE / PROFILE	MATERIAL	LENGTH	<b>COLOURS / FINISHES</b>
AR268	Aluminium	2.70m	F0 Natural Aluminium F4 Silver Anodised

Dimensions shown are nominal. Illustrations are 70% size in mm. Products subject to minor design alterations without notice.

105

Section (



Visit: www.gradus.com to download: AutoCAD drawings, Gradus & NBS Specifications, Cleaning & Maintenance, Installation Guidelines and Health & Safety Data Sheets.

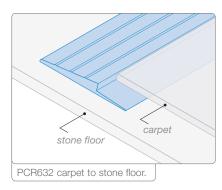
	CODE / PROFILE	MATERIAL	LENGTH	COLOURS / FINISHES
RT264	17 no.4 2.5-5 28 ↓ ↑	Aluminium	2.70m	F3 Polished F4 Silver Anodised
RT265	17 no.4 5-7 38 − ↑ ↑	Aluminium	2.70m	F3 Polished F4 Silver Anodised
TA16	3.5 5	Aluminium	2.75m	Mill Finish
RT330	19 3 ĨĨ no.4 38	Aluminium	2.70m	F3 Polished F4 Silver Anodised
RT250S	۲۲ no.6	Aluminium	2.70m	F3 Polished F4 Silver Anodised
RT247	17 no.4 0-18 ↓ ↓	Aluminium	2.70m	F3 Polished F4 Silver Anodised
RT245	Image: Non-4       Image: Non-4	Aluminium	2.70m	F3 Polished F4 Silver Anodised

Dimensions shown are nominal. Illustrations are 70% size in mm. Products subject to minor design alterations without notice.

A

## Ramp Edges - Pvc

Used to join floorcoverings such as carpet to flooring of a lower height, e.g. stone, concrete or resilient.





R

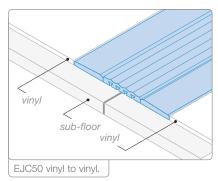
Visit: www.gradus.com to download: AutoCAD drawings, Gradus & NBS Specifications, Cleaning & Maintenance, Installation Guidelines and Health & Safety Data Sheets.

CODE / PROFILE		MATERIAL	LENGTH	COLOURS / FINISHES				
CVT5	52 9→ 2.5 34 5.5	рус	2.00m	<ul><li>Black</li><li>Brown</li><li>Granite</li><li>Dove</li></ul>				
CTR5	$\begin{array}{c} 42 \\ \hline 9 \\ \hline 33 \\ \hline 5.5 \end{array}$	рус	2.00m	<ul><li>Black</li><li>Brown</li><li>Granite</li><li>Dove</li></ul>				
PCR632	46	рус	2.00m	<ul><li>Black</li><li>Brown</li><li>Granite</li><li>Dove</li></ul>				
PCR932	9 11 11	рус	2.00m	<ul><li>Black</li><li>Brown</li><li>Granite</li><li>Dove</li></ul>				
T450	4.5	рус	2.00m	<ul> <li>Black</li> <li>Brown</li> <li>Granite</li> <li>Dove</li> </ul>				
Т600	6 6	pvc	2.00m	<ul><li>Black</li><li>Brown</li><li>Granite</li><li>Dove</li></ul>				

Section (N)

## **Construction Joint Covers**

Used to provide a cover for construction joints offering a neat solution that allows minor movement to occur. Profiles are adhered using contact adhesive, applied to the solid outer sections only. Note: EJC profiles are not recommended for structural expansion joints.



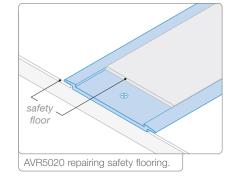


Visit: www.gradus.com to download: AutoCAD drawings, Gradus & NBS Specifications, Cleaning & Maintenance, Installation Guidelines and Health & Safety Data Sheets.

CODE / PROFILE	MATERIAL	LENGTH	COLOURS / FINISHES
EJC50 2 50	рус	15m coil	<ul><li>Black</li><li>Brown</li><li>Granite</li><li>Dove</li></ul>
EJC75	pvc	15m coil	<ul><li>Black</li><li>Brown</li><li>Granite</li><li>Dove</li></ul>
EJC75 3.2	рус	15m coil	<ul><li>Black</li><li>Brown</li><li>Granite</li><li>Dove</li></ul>
EJC125	рус	15m coil	<ul><li>Black</li><li>Brown</li><li>Granite</li><li>Dove</li></ul>

## Floor Repair Trim

Used to repair resilient floorcoverings where welded joins have failed. Utilises strips of the same floorcovering to provide an unobtrusive repair. Can be used at door interfaces to provide a robust transition. Supplied pre-drilled with countersunk holes.

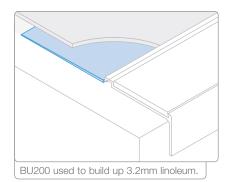


CODE / PROFILE	MATERIAL	LENGTH	<b>COLOURS / FINISHES</b>
<b>AVR5020</b> ິ້າໃ no.6			
20 50 50	Aluminium	3.20m	Mill Finish
Shown with floorcovering for illustration purposes only (not supplied)			

## **Bevelled Underlay**

**(†** 

Used as a diminishing strip and is ideal for building up the height of resilient floorcovering to meet a thicker gauge material or a stair edging. Grooves along the underside of BU800 provide a straight cutting edge at points where the thickness gives ideal height adjustment.





Section (

Visit: www.gradus.com to download: AutoCAD drawings, Gradus & NBS Specifications, Cleaning & Maintenance, Installation Guidelines and Health & Safety Data Sheets.

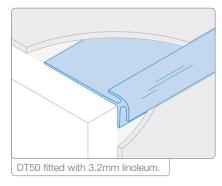
160

CODE / PROFILE	MATERIAL	LENGTH	<b>COLOURS / FINISHES</b>
BU200 2 65	pvc	15m coil	Black
BU800 see below	pvc	15m coil	Black
3			BU profiles contain up to



## **Dual Trim**

Used to provide a neat finish to the edge of raised areas such as tiered seating in lecture theatres or display platforms in retail environments. Suitable for use with resilient floorcoverings and thin gauge carpet. Note: NOT suitable for use as a stair edging.



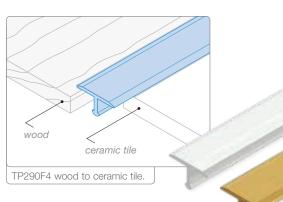


50% recycled content.

CODE / PROFILE	MATERIAL	LENGTH	<b>COLOURS / FINISHES</b>
DT50	PVC-u	2.50m	Black Brown Granite Dove

## **Transition T Profiles**

Used for joining different floorcoverings of the same, or slightly differing, heights. The design of the T profiles allows slight imperfections in joints and cuts to be hidden, and enables a gap between floor finishes to be incorporated during installation to allow for natural expansion in flooring materials such as ceramics and wood. Profiles can be curved on-site using a bending machine for shaped edges and inlays (see page 86). T profiles are fitted after the floorcoverings have been installed, making them ideal for use when the installation of the floorcoverings is undertaken by different trades (e.g. ceramic contractors and flooring contractors) where the trims cannot be fixed until both floors have been completed.



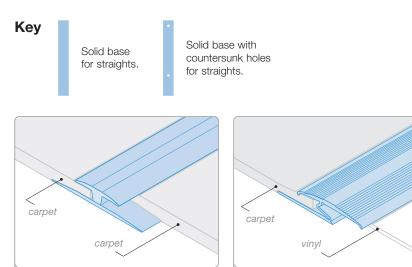
Visit: www.gradus.com to download: AutoCAD drawings, Gradus & NBS Specifications, Cleaning & Maintenance, Installation Guidelines and Health & Safety Data Sheets.

	CODE / PROFILE	MATERIAL	LENGTH	COLOURS / FINISHES
TP290F4	$6_{15}^{5}$ $6_{5}^{14}$ $6_{5}^{5}$ 500mm Bending machine required see page 86	Aluminium	2.70m	F4 Silver Anodised
TP290F7	65 = 5 = 6 Bending machine required see page 86	Brass	2.70m	F7 Polished
TP291F4	6.5 + 1200  mm 6.5 + 1200  mm 6.5 + 1200  mm 6.5 + 1200  mm 1200  mm Bending machine required see page 86	Aluminium	2.70m	F4 Silver Anodised
TP295F4	6.5 Bending machine required see page 86	Aluminium	2.70m	F4 Silver Anodised
TP293F4	$6_{15}^{c} \underbrace{5}_{1}^{28} \underbrace{6_{15}^{c}}_{5}^{1} + 13$ $Bending machine required see page 86$	Aluminium	2.70m	F4 Silver Anodised

## **Threshold Trims**

TH495 carpet to carpet.

Used to join floorcoverings of the same height usually at door or room thresholds. Typically used at door interfaces or to define changes in area.



	CODE / PROFILE	MATERIAL	LENGTH	COLOURS / FINISHES
TH382	7 17 no.4 24 14	Aluminium	2.70m	F3 Polished F4 Silver Anodised
		TH382 and TH383 - the top	section shoul	d be lightly

TH382 carpet to vinyl.

Folding points

dressed down using a rubber mallet after installation to ensure a tight fit to edges of both floorcoverings.

TH383 30 F3 Polished Aluminium 2.70m 15 F4 Silver Anodised ۱̃/no.4 28 TH495 Zinc 22 рус Тор Doubloon 2.50m PVC-u Base Platinum 48 Silver CET5 Black Brown 35 Granite 2.00m pvc 5.5 10.5 Bluebell Dove Clay

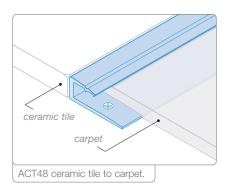


## Square Edge Trims

R

Typically used with carpet, carpet tile, wood and wood laminate at the junction with other flooring materials such as other carpets, ceramics and wood. Provide a neat finish to floorcoverings, protecting the edges from damage and also hiding any slight imperfections in joints or cuts. Selected square edges are also available with pre-punched bases and tabs for on-site curving as indicated.

Visit: www.gradus.com to download: AutoCAD drawings, Gradus & NBS Specifications, Cleaning & Maintenance, Installation Guidelines and Health & Safety Data Sheets.





Pre-punched with tabs and fixing holes for on-site curving.

Solid base for straights.

Solid base with countersunk holes for straights.



## Square Edge Trims

CODE / PROFILE	MATERIAL	LENGTH	COLOURS / FINISHES
ET805	Aluminium	2.50m	F3 Polished F4 Silver Anodised
	500mm Aluminium	2.50m	F4 Silver Anodised
ACT48	Aluminium Available with or without carpet gripper	3.20m	Mill Finish
ET210	Aluminium	2.70m	F3 Polished F4 Silver Anodised
ET210EBF4	3000mm Aluminium 2000mm e page 86	2.70m	F4 Silver Anodised
ET212	Aluminium	2.70m	F3 Polished F4 Silver Anodised
ET212EBF4	3000mm Aluminium 3000mm e page 86	2.70m	F4 Silver Anodised

Dimensions shown are nominal. Illustrations are 70% size in mm. Products subject to minor design alterations without notice.

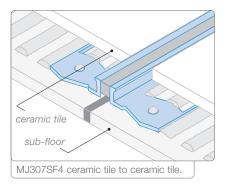
Section (N

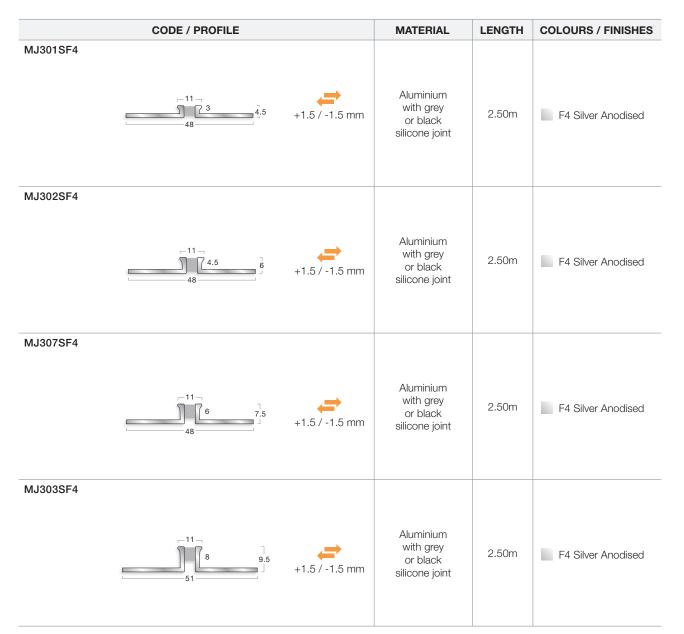
## **Movement Joints**

Are used to join floorcoverings where expansion up to 1.5mm is required. Designed specifically for use with flooring materials such as ceramic tile, marble, stone, terrazzo and resins only. All profiles feature a perforated base for fixing.

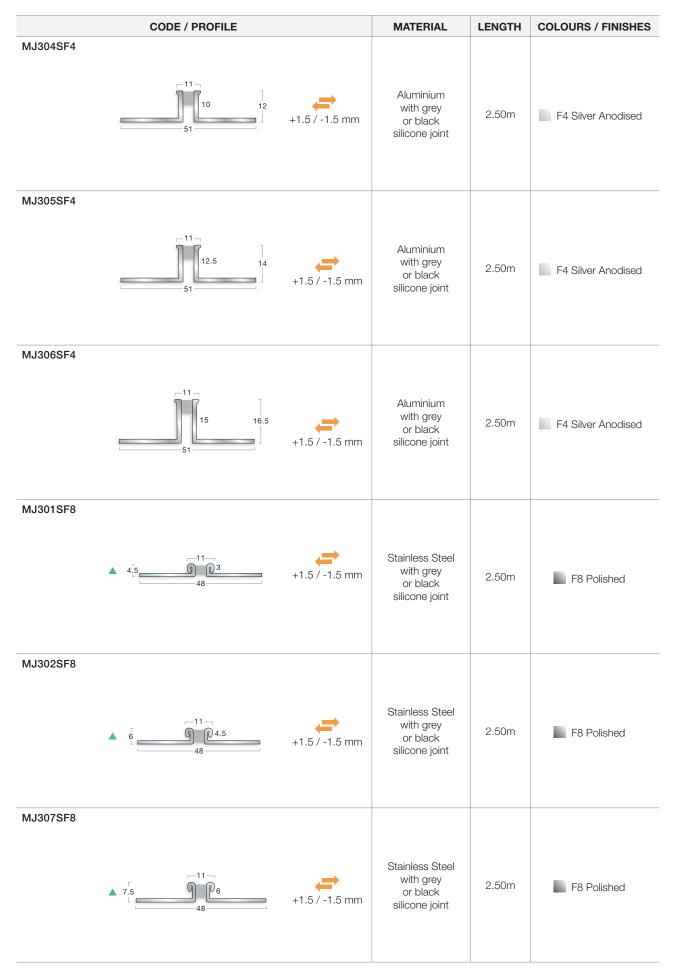
**A** 

Visit: www.gradus.com to download: AutoCAD drawings, Gradus & NBS Specifications, Cleaning & Maintenance, Installation Guidelines and Health & Safety Data Sheets.





## **Movement Joints**



▲ Note there is a +/- 0.5mm tolerance on the height of stainless steel movement joint profiles.

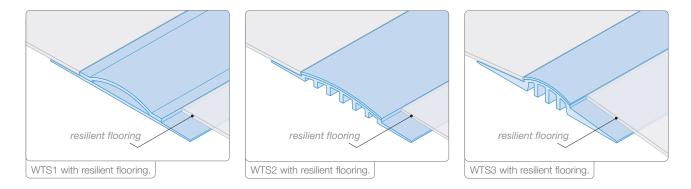
Section (N

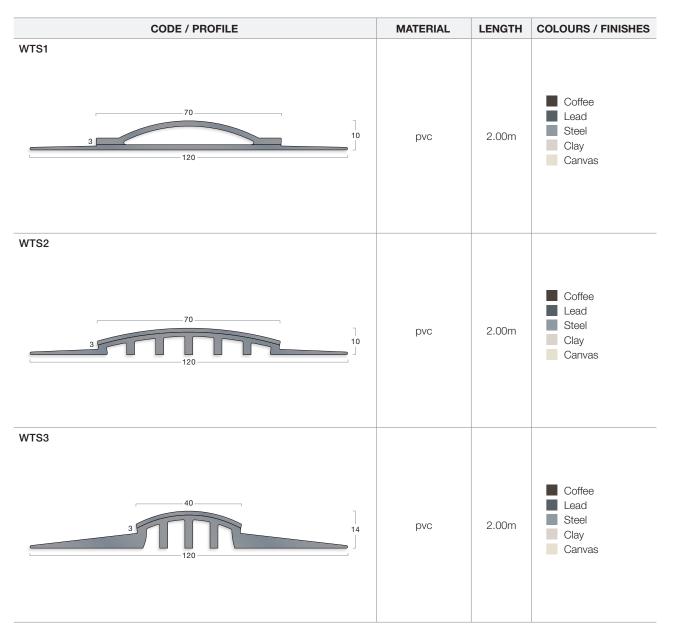
## Wetroom Transition Strips

Wetroom transition strips are designed to be incorporated into the resilient flooring in wetrooms and shower areas in order to contain water and prevent it encroaching into dry areas. Gradus WTS wetroom transition strips are tested for slip-resistance in barefoot areas and are designed to be safe and comfortable underfoot whilst allowing wheelchair access. For larger colour swatches and LRV readings see page 62.



Visit: www.gradus.com to download: AutoCAD drawings, Gradus & NBS Specifications, Cleaning & Maintenance, Installation Guidelines and Health & Safety Data Sheets.

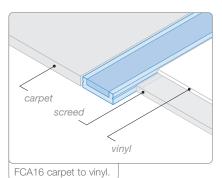




## **Feature Strip**

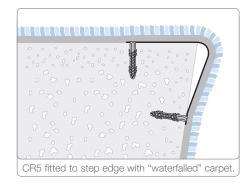
Acts as a joining strip to help define walkways or separate floorcoverings of the same height. Utilises pvc insert material to add colour and design (supplied separately - see page 17 for larger colour swatches and LRV's).

Visit: www.gradus.com to download: AutoCAD drawings, Gradus & NBS Specifications, Cleaning & Maintenance, Installation Guidelines and Health & Safety Data Sheets.



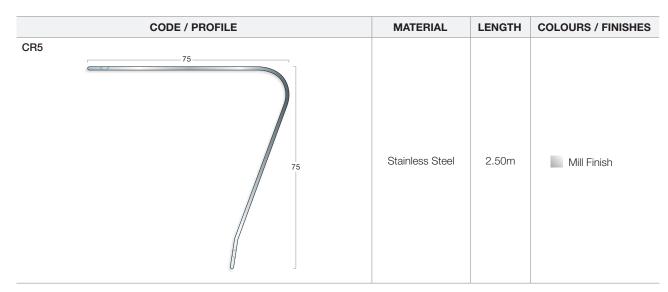
Standard Inse	rt			Grained Insert
Jet	Midnight	Lead	Glacier	Black
Ink	Evergreen	Steel	Canvas	Brown
Burgundy	Ocean	Cloud	Buttercup	Granite
Coffee	Poppy	Linen	Snowdrift	Dove

CODE / PROFILE	MATERIAL	LENGTH	COLOURS / FINISHES
FCA16 + INS12	FCA16 Aluminium	2.50m	
5.5	INS12 pvc insert	2.50m / 15m coil	See above
	Insert tape	51m coil	



## **Contour Edge**

Contour Edge is designed to be used where a stair edging is not required and the carpet is "waterfalled" from the top to the bottom of a flight of stairs, usually in domestic applications or buildings exempt from standard building guidelines e.g. heritage buildings. It also helps to reduce wear to both the floorcovering and the leading edge of the step. Supplied pre-drilled.





# **Section 3**

# Skirtings, Capping Strips & Accessories

Information to ensure the correct selection of skirtings, capping strips and other accessories along with details of colour availability. Details of Gradus pvc skirtings, metal skirtings, cove formers and capping strips can be found in this section.

# **Choosing the right skirting**

## Area of Application

Skirtings, cove formers and capping strips are used to provide clean, neat solutions for junctions where the floor meets the wall.

Gradus offers solutions to suit most contract applications, from 'critical' clean areas where a homogeneous finish is essential such as hospital wards, treatment rooms, and food & pharmaceutical environments, through to commercial office, education or retail environments where functionality needs to be combined with aesthetics. Healthcare, food & pharmaceutical and education environments in particular benefit from the use of pvc skirtings that can be welded to resilient floorcoverings in order to create completely impervious seals to meet cleaning and hygiene requirements.

For further guidance on the use of pvc skirtings in healthcare environments refer to: Health Technical Memorandum (HTM): Flooring 61 – 3 Design Guidance, Skirtings 3.13 - 3.19.

## **Materials & Profiles**

#### Options

Selecting the correct type of skirting profile will ensure that product performance matches the environment requirements and will result in a functional, low maintenance alternative to traditional skirtings.

#### **Pvc Skirtings**

**Set-in** – typically used with resilient floorcoverings, this type of skirting is welded to the floorcovering in order to create an impervious seal. Ideal for critical clean areas (e.g. treatment rooms, pharmaceutical production) or areas subject to wet cleaning (e.g. school and hospital corridors). Selected set-in skirtings are available in 15m coils in order to reduce the number of vertical joints required.

**Sit-on** – typically used with hard floorcoverings. Ideal for use in areas where a neat, clean finish is required but an impervious seal is not required e.g. general circulation areas in schools and hospitals.

**Flat** – used primarily with textile floorcoverings to form a neat, low-maintenance alternative to timber skirting.

**Capping Strips & Cove Formers** – used when floorcoverings are continued up the wall. Cove former ensures a consistent cove is achieved and supports the floorcovering at a weak point. Capping strips provide a neat finish where the floorcovering stops.

#### **Stratum Pvc Skirting**

.....

An alternative to traditional timber skirting, this 10mm thick skirting provides the look of painted wood whilst offering a low maintenance solution. Ideal for creating a neat finish in non-critical clean areas, and in all contract environments where ongoing maintenance and aesthetics are important factors.

#### **Metal Skirtings**

Modern alternative to pvc or timber skirtings. Creates a modern, hi-tech finish for environments such as commercial office, retail and leisure. Low voltage cable management system also incorporated in selected profiles.

## **Aesthetics**

Gradus skirtings & cappings are available in a range of colours and finishes to complement most interior environments.

In addition, the use of a skirting that contrasts in colour and luminance with the floorcovering can assist visually impaired people to determine the borders of the room. As a guide, skirtings should either match the wall colour, or provide a complete contrast with both the wall and floor.

For further details on visual contrast see pages 144-145, 147.

# **Colour Availability**

## Standard

Black LRV: 4.62	NO0- 7500 D	Evergreer		Brown LRV: 7.04	NCS: 6010-Y70R	• • •	Bur NCS
LRV: 4.62	NCS: 7502-B	LRV: 6.53	NCS: 7020-B70G	LRV: 7.04	NCS: 6010-970R	0 0 0 0	NCS
Granite	NO0- 0500 D	Bluebell	NO0- 5000 D00D	Hickory	NO0: 4040 V00D	•	Zino
LRV: 10.44	NCS: 6502-R	LRV: 11.28	NCS: 5030-R90B	LRV: 16.10	NCS: 4040-Y80R	0 0 0 0	NCS
Stone		Azure		Blueberry		•	Dou
LRV: 19.73	NCS: 5005-Y20R	LRV: 9.99	NCS: 4050-R80B	LRV: 22.97	NCS: 4020-R90B	0 0 0 0 0	NCS
Dove		Leaf		Dune		•	Plat
LRV: 26.50	NCS: 5000-N	LRV: 31.58	NCS: 4010-B90G	LRV: 49.67	NCS: 2020-Y30R	0 0 0 0 0	NCS
Almond	NO0 0010 V/00	Glacier	NO0 0500 D	Mist	NO0 0500 N	•	Silv
LRV: 38.00	NCS: 3010-Y40R	LRV: 40.09	NCS: 2502-B	LRV: 58.74	NCS: 2500-N	0 0 0 0	NCS
Salmon		Snowdrift					
LRV: 50.61	NCS: 2010-Y70R	LRV: 80.86	NCS: 0500-N				

## Metallics Burnt Almond NCS: 7010-Y50R Zinc NCS: 600-R80B Doubloon NCS: 4020-Y Platinum NCS: 2005-Y40R Silver NCS: 2005-R80B

#### Metals

Aluminium

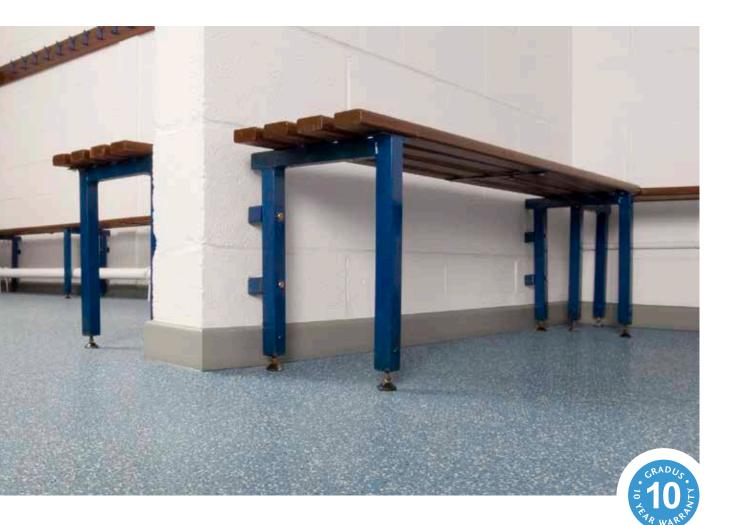
Silver Anodised Aluminium

Satin Stainless Steel

. . . . . .

proces be relie An acc by req	ss, col ed upo curate juesting	Due to the limitations of the printing ours within this catalogue should not on for colour matching. colour match can only be achieved g the relevant product sample(s) from inical Support on 01625 428922.	Stratum STM7510, STM10010	81100, 8110055, 8110032, 81100502.5, 81100503.2, 81150, SO25, FS150B	SI100502, SO100, FS303, FS100B, PCS40	SO75, SO150	CSI100502, HCS48, HCS50	CSI1 00502.25	DFS100	Range Skirtings & PCS40P	CC40, CC75	CCF1001	TC47	TC48	MCS48	MCC40, MCC75	MAS90 Range	MAS95 Range, MAS97 Range	MSS790 Range	ACC40
		quantities & lead times	St	ର ର ର	UN UN	0 N	ö	ö	B		Ö	Ö	μ	P	ž	ž	Σ	Σ	Ë	AC
	I	Black		•	•	•	•	•	•	•	•			•						
	I	Evergreen		<b>A</b>	•	•	•													
	I	Brown		•	•	•	•	•	•	▲	•									
	I	Granite	•	•	•	•	•	•	•		•									
		Bluebell		▲	•	•	•		•	▲	•									
	I	Hickory		<b>A</b>	•															
	_	Stone		<b>A</b>	•	•	•													
	Standard	Azure		<b>A</b>	•															
	pu	Blueberry		<b>A</b>	•															
	Sta	Dove	•	•	•	•	•	•	•		•	•								
	<b>°</b>	Leaf		<b>A</b>	•															
	- I	Dune		<b>A</b>	•															
	- I	Almond		<b>A</b>	•	•	٠		•			•								
		Glacier		<b>A</b>	•	•	•					•								
		Mist		<b>A</b>	•															
		Salmon		<b>A</b>	•															
	[	Snowdrift	•	<b>A</b>	•	•	•		•		•	•	•	•						
	<i>(</i>	Burnt Almond												٠						
	.≝ I	Zinc												٠	•	•				
	Metallics	Doubloon												•	•	•				
	A le	Platinum												•	•					
_		Silver												•	•	•				
	als_	Aluminium																		•
	Metals	Silver Anodised Aluminium															•	•		
	Σ	Satin Stainless Steel																	•	

## Stratum<sup>™</sup> Skirtings - Pvc



## Description

The Gradus Stratum range comprises heavy-duty pvc skirting profiles suitable for a wide range of contract applications including education, healthcare and commercial office.

Life cycle analysis shows Stratum is a cost effective alternative to wood skirtings. The smooth matt finish is resistant to stains, dents and scratches, and will not splinter, chip and crack like traditional wood skirtings, offering a low maintenance hygienic solution to wall base finishing.

Stratum can be installed around gentle curves and can also accommodate and disguise minor irregularities in wall surfaces.

## **Profile Information**

- Suitable for interior use in most areas
- Stratum is a cost effective alternative to finished timber skirting that utilises up to 80% recycled pvc in its construction and is suitable for all areas that require a high quality finish to be maintained through the life of the building
- Eliminates the need for processes normally associated with wood skirting such as sanding, priming, filling and painting

## **Installation Advice**

- Stratum skirtings are installed to the wall using a proprietary cartridge adhesive
- Internal/external corners can be mitred on site

#### Colour

• For larger colour swatches see page 121



Visit: www.gradus.com to download: AutoCAD drawings, Gradus & NBS Specifications, Cleaning & Maintenance, Installation Guidelines and Health & Safety Data Sheets.



 Typical example: timber skirting is typically redecorated once in a 10 year period – total expenditure is approximately 50% more than material and labour costs spent on installing Stratum. The saving will be greater if redecoration is required more often.

# **Pvc Skirtings**



## Description

An extensive range of pvc skirtings, through-coloured for maximum performance and maintenance.

Profile designs are available for use in conjunction with floorcoverings from all major manufacturers.

Suitable for a wide range of commercial applications.

## **Installation Advice**

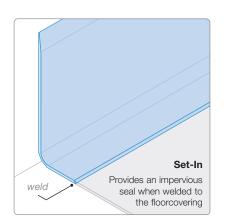
 Pvc skirtings are secured to all wall surfaces using contact adhesive

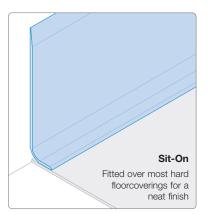
#### **Profile Information**

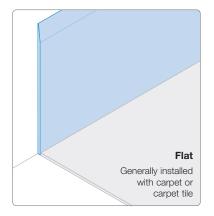
- Suitable for interior use
- Set-in skirtings are ideal for use in areas subject to regular wet cleaning e.g. hospital treatment areas as they can be welded to the floorcovering to provide an impervious seal.
- Coilable set-in skirtings minimise vertical joints. Ideal in areas where both the horizontal and vertical joints require welding e.g. food preparation areas & clinical treatment areas.

#### Colour

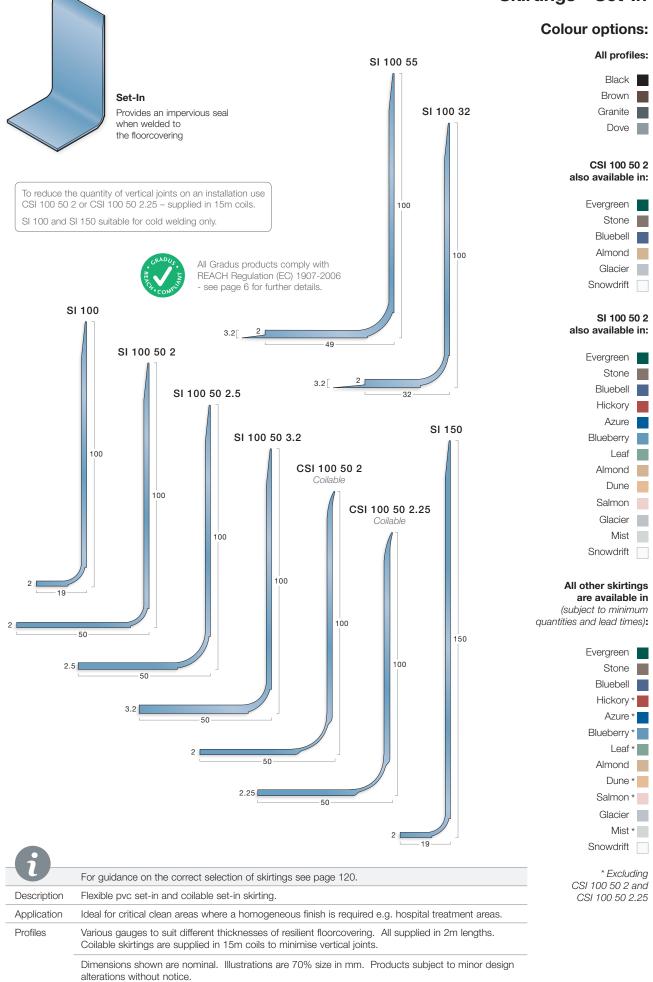
• For larger colour swatches see page 121





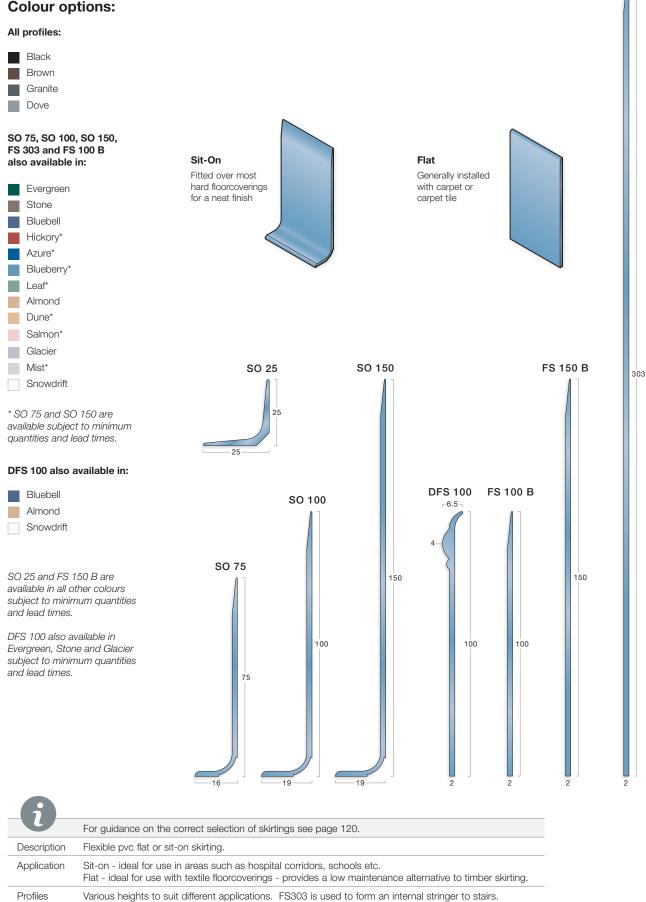


## **Skirtings - Set-In**



## Skirtings - Sit-On & Flat

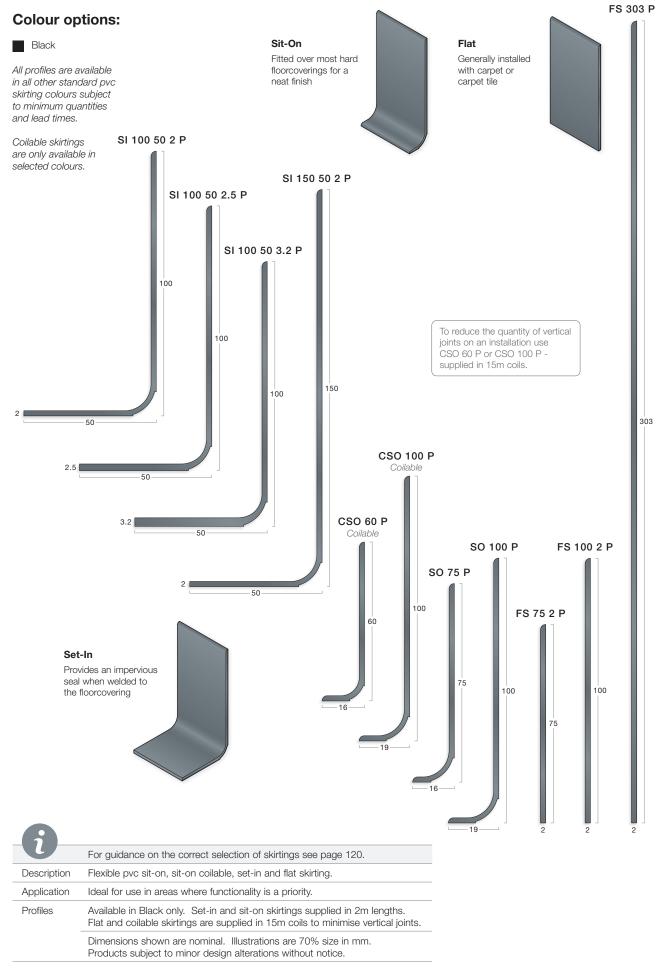
## **Colour options:**



FS 303

Various heights to suit different applications. FS303 is used to form an internal stringer to stairs. Sit-on skirtings supplied in 2m lengths. Flat skirtings are supplied in 15m coils to minimise vertical joints. Dimensions shown are nominal. Illustrations are 70% size in mm. Products subject to minor design alterations without notice.

## 'P' Range Skirtings - Set-In, Sit-On & Flat



## **Capping Strips & Cove Formers**



## Description

An extensive range of pvc, PVC-u and aluminium capping strips, cove formers and accessories used where floorcoverings are dressed up the wall to form a skirting with a neat finish, and to join floorcoverings to wall finishes. Suitable for use with carpet, resilient floorcoverings and ceramic tiles. Available in choice of colours that can be used in conjunction with floorcoverings from all major manufacturers. Suitable for a wide range of commercial applications.

R

Visit: www.gradus.com to download: AutoCAD drawings, Gradus & NBS Specifications, Cleaning & Maintenance, Installation Guidelines and Health & Safety Data Sheets.

## Profile

- Suitable for interior use
- Capping seals provide a decorative, neat edge where resilient floorcoverings are dressed up the wall to form a skirting.
   Available to suit resilient floorcoverings up to 5mm thick
- Carpet caps provide a decorative, neat edge where carpets are dressed up the wall to form a skirting. Available to suit carpets up to 7mm thick (compressed thickness)
- Cove formers provide a neat cove allowing floorcoverings to be dressed up the wall to form a skirting and supports the floorcovering at a weak point
- Tile caps are for use where ceramic wall tiles are finished against a resilient floor finish that has been dressed up the wall to form a skirting. Available to suit resilient flooring up to 6mm thick

#### **Installation Advice**

- Capping seals and tile caps are secured to wall surfaces using contact adhesive
- Carpet caps are secured with screws and adhesives to wall surfaces

#### Colour

For larger colour swatches see page 121

## **Capping Strips & Cove Formers**

#### **Capping Seals**

## **Colour options:**

#### HCS48 and HCS50:

Black Evergreen

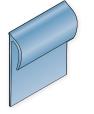
> Brown

Granite

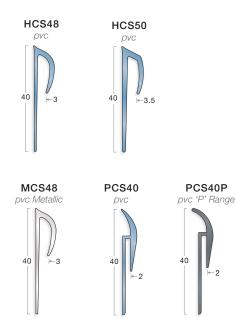
Bluebell

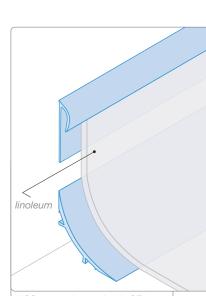
Stone

Dove 



Flexible pvc capping seals are used to finish the top of a resilient floorcovering where it has been coved up the wall. Capping seals are usually used in conjunction with a cove former (see page 130).



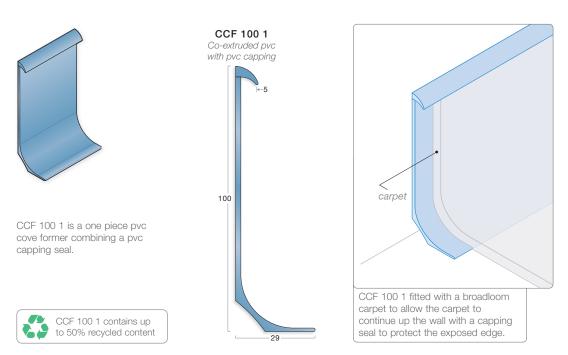


HCS48 capping seal with CF38 cove former and a 3mm linoleum.



All Gradus products comply with REACH Regulation (EC) 1907-2006 see page 6 for further details.





2



Brown Azure Granite Bluebell Stone Hickory Blueberry Dove Leaf Almond Dune Salmon Glacier Mist Snowdrift

Section

3

#### PCS40P:

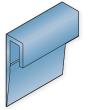
Black

#### CCF 100 1:

Dove Almond Glacier Snowdrift

## **Capping Strips & Cove Formers**

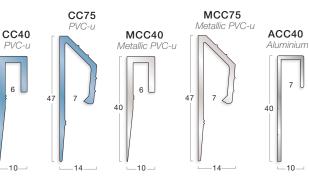
## **Carpet Caps**



40

**Tile Caps** 

Carpet caps are used to provide a neat finish where carpet or carpet tile is continued up the wall. Available in choice of PVC-u, Metallic PVC-u and Aluminium. Carpet caps can be combined with a cove former where required to help form a cove.



Tile caps are used where ceramic wall tiles are finished against a resilient floor finish that has been dressed up the wall to form a

**TC48** 

Co-extruded PVC-u with pvc cap

skirting.

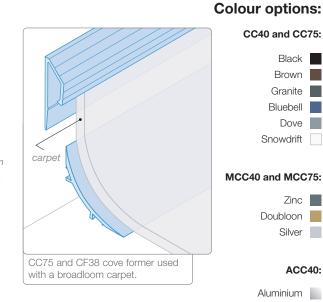
**TC47** 

PVC-u

7.5

6

48



TC47:

Zinc

Silver

ACC40:

Black

Brown

Granite

Bluebell Dove

## Snowdrift



Black



ceramic tile

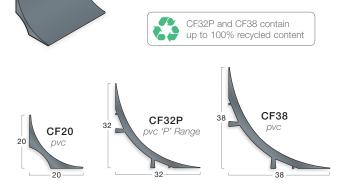
linoleum

continue up the wall.

CF38 cove former being used to form a cove for linoleum to



Cove formers are used to form a cove where floorcoverings are continued up the wall. Cove formers are usually used in conjunction with a capping seal or carpet cap to finish the raw edge of the floorcovering (see page 129).



# **Metal Skirtings**



## Description

Gradus metal skirtings are available in a variety of designs and heights to suit the requirements of modern commercial environments.

Profiles are available in a variety of finishes including stainless steel and aluminium.

MAS95 and MAS97 profiles have also been designed with a cable tidy feature where low voltage cables e.g. computer and telephone cables, can be hidden from view.

## Which Skirting?



slimline skirting profile in either silver anodised aluminium or stainless steel.



anodised aluminium skirting profile fixed to the wall using interlocking fixing brackets.

## **Profile Availability**

#### Profile designs to accommodate most floorcoverings

- Sit-on skirtings in a variety of heights 60mm, 70mm, 80mm and 100mm
- MAS90, MAS95 & MAS97 supplied in 2m lengths (anodised aluminium)
- MSS790 supplied in 2.7m lengths (stainless steel)
- Subject to lead times

#### Installation Advice

#### Visit www.gradus.com for full installation instructions

- MAS95 and MAS97 profiles are fixed to the wall using screw fixings
- MAS90 and MSS790 profiles are fixed to the wall using appropriate adhesive
- Coordinating metal or PVC-u accessories available for neat finishing on-site, see pages 132 to 133 for further details

#### Colour

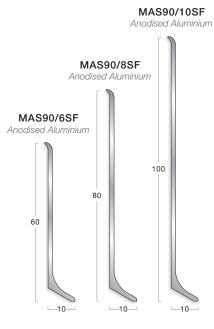
• For larger colour swatches see page 121

## Metal Skirtings - Modern Hi-Tech Finishing

## **MAS90 Aluminium Skirtings**



Description	Silver anodised aluminium *
Application	Ideal for use in areas where a modern hi-tech finish is required. Designed to be installed on top of the floorcovering. The capped toe design of the profile allows wall-to-floor expansion gaps to be hidden when installed with tiled floorcoverings.
Profiles	Supplied in 2m lengths.



Metal accessories in a silver anodised finish are available for the MAS90 profiles for neat finishing on site.

Skirting Profile	Height	Finish	End Caps	Junction	External Corner	Internal Corner
MAS90/10SF	100mm	Silver	MAS90/10MP	MAS90/10MG	MAS90/10ME	MAS90/10MI
MAS90/8SF	80mm	Silver	MAS90/8MP	MAS90/8MG	MAS90/8ME	MAS90/8MI
MAS90/6SF 60mm Silver MAS90/6MP MAS90/6MG MAS90/6ME MAS90/6MI						
Note: All accessories are	Note: All accessories are supplied in packs of 4 except for End Caps which are supplied as 4 sets of 2 (one left hand and one right hand)					(b



MSS790/8SF

\* Note: Additional finishes are available on request subject to minimum quantities and lead times.

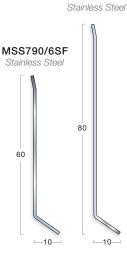
## **MSS790 Stainless Steel Skirtings**



Description	Stainless steel satin finish
Application	Ideal for use in areas where a modern hi-tech finish is required. Designed to be installed on top of the floorcoverings. The capped toe design of the profile allows wall-to-floor expansion gaps to be hidden when installed with tiled floorcoverings.
Profiles	Supplied in 2.7m lengths.

Metal accessories in a satin finish are available for the MSS790 profiles for neat finishing on site.

Skirting Profile	Height	Finish	End Caps	Junction	External Corner	Internal Corner
MSS790/8SF	80mm	Satin	MSS790/8MPS	MSS790/8MGS	MSS790/8MES	MSS790/M8IS
MSS790/6SF	60mm	Satin	MSS790/6MPS	MSS790/6MGS	MSS790/6MES	MSS790/M6IS
Note: All accessories are supplied in packs of 4 except for End Caps which are supplied as 4 sets of 2 (one left hand and one right hand)						



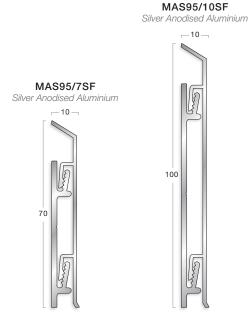


132

## Metal Skirtings - Modern Hi-Tech Finishing

#### **MAS95 Interlocking Aluminium Skirtings**

Description	Silver anodised aluminium with interlocking aluminium fixing brackets.
Application	Ideal for use in areas where a modern finish is required. Design allows low voltage (computer & telephone) cables to be hidden behind the skirting profile.
Profiles	Supplied in 2m lengths. 3 fixing brackets supplied per length.



Accessories are available for the MAS95 profiles for neat finishing on site. These are supplied in silver finish PVC-u to co-ordinate with the aluminium skirting profiles.

Skirting Profile	Height	Finish	End Caps	Junction	External Corner	Internal Corner
MAS95/10SF	100mm	Silver	MAS95/10P	MAS95/10G	MAS95/10E	MAS95/10I
MAS95/7SF	70mm	Silver	MAS95/7P	MAS95/7G	MAS95/7E	MAS95/71
Note: All accessories are supplied in packs of 4 except for End Caps which are supplied as 4 sets of 2 (one left hand and one right hand)						



5

## MAS97 Interlocking Aluminium Skirting

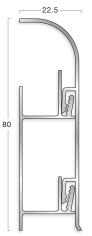


Description	Silver anodised aluminium with interlocking aluminium fixing brackets.
Application	Ideal for use in areas where a modern finish is required. Design allows low voltage (computer & telephone) cables to be hidden behind the skirting profile.
Profiles	Supplied in 2m lengths. 3 fixing brackets supplied per length.

Accessories are available for the MAS97 profiles for neat finishing on site. These are supplied in silver finish PVC-u to co-ordinate with the aluminium skirting profiles.

Skirting Profile	Height	Finish	End Caps	Junction	External Corner	Internal Corner
MAS97/8SF	80mm	Silver	MAS97/8P	MAS97/8G	MAS97/8E	MAS97/8I
Note: All accessories are supplied in packs of 4 except for End Caps which are supplied as 4 sets of 2 (one left hand and one right hand)						

MAS97/8SF Silver Anodised Aluminium





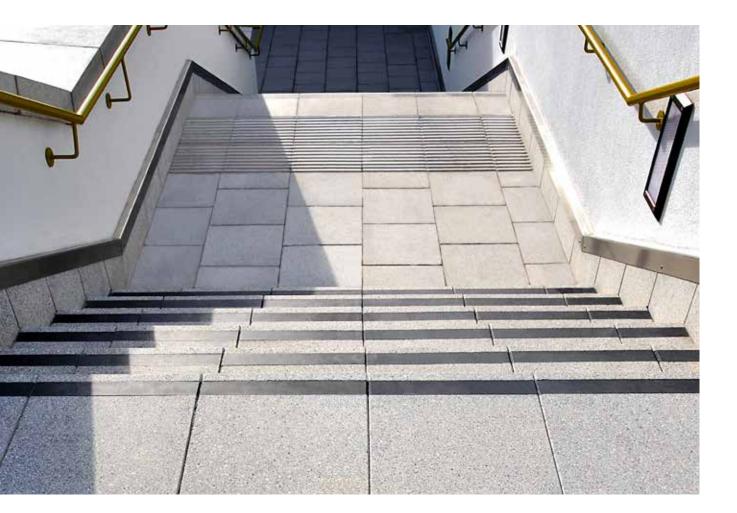


# **Section 4**

# Associated Products for Stairs & Floors

Information on Gradus products that are typically associated with stairs and surrounding areas: slip-resistant surface finishes, tactile surface and cable ducts.

# Stairtile<sup>™</sup> - Slip-Resistant Flooring



## Description

Stairtile is a rubber composite material designed to provide a hard-wearing, slip-resistant finish for stairs and floors. It can be installed in a wide range of applications such as shopping centres, car parks and other high usage circulation areas. It can be used as a complete stair covering or as an insert set into terrazzo, wood and concrete. Stairtile is suitable for use in both internal and external applications and is available in a choice of 4 colours.

When using Stairtile strips on step edges, in order to ensure that the guidance in The Building Regulations 2010: Approved Document M is followed, Gradus recommends a minimum width (front to back) of 50mm to ensure a sufficient degree of colour contrast is achieved. Stairtile must be set as close to the leading edge of the step as possible. Discs not suitable for step edges.

## **Profile Information**

#### Available in a choice of 2 gauges

- 6.5mm sanded finish typically supplied to ready-prepared floor finishes
- 8.0mm sanded finish typically supplied where further site finishing is required
- To ensure slip-resistant properties are maintained, any build up of contaminants such as grease must be managed using a thorough and regular cleaning regime
- Discs not suitable for step edges as they do not form a solid band as recommended.

#### **Installation Advice**

- Rebated product fitted with epoxy adhesive and screws
- Can be supplied pre-drilled (minimum profile width 20mm).
   Screw head cover plugs supplied
- Cast-in products require no mechanical fixing
- Can be installed using Gradus Grip see page 13

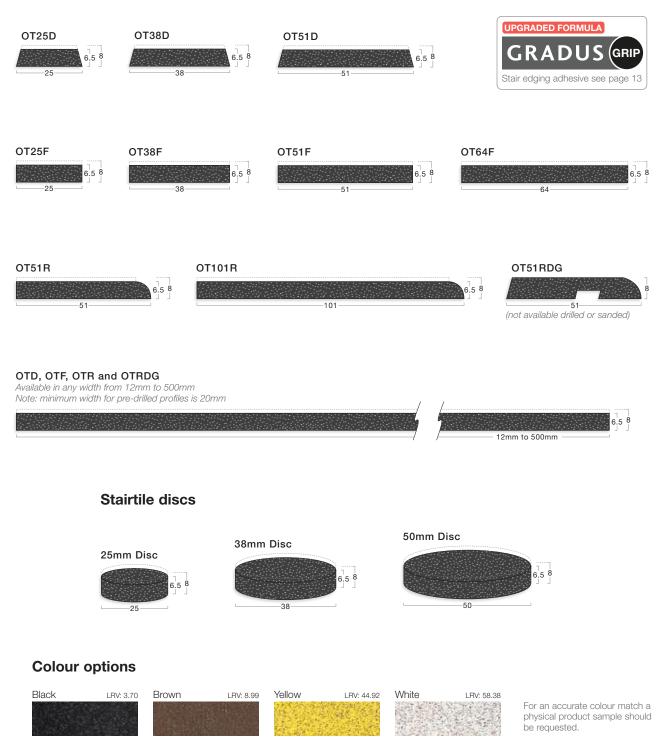


Visit: www.gradus.com to download: AutoCAD drawings, Gradus & NBS Specifications, Cleaning & Maintenance, Installation Guidelines and Health & Safety Data Sheets.

## Stairtile<sup>™</sup> - Slip-Resistant Flooring

- <b>i</b> -		
Material	Rubber composite	
Application	Typically used with concrete, terrazzo, wood, stone and marble	
	OT/F profiles are rebated into existing steps	Potential for Slip
	OT/D and OT/RDG profiles are pre-cast into new steps	Dry Conditions Low (PTV >36)
	OT/R profiles can be rebated as a step edge Discs not suitable for step edges as they do not form a solid band as recommended.	Wet Conditions Low (PTV >36)
Profiles	Dimensions shown are nominal. Illustrations are 70% size in mm. Products subject to minor design alterations without notice.	Tested using the pendulum tester (see figure 2 on page 143 for details).

## **Stairtile strips**



Section (4)

## **Cable Ducts - Cable Management**



## Description

Cable Ducts combine the principle of Gradus Clip-Top functionality with the added benefit of securing loose or trailing light duty cables such as computer cables. The Workplace (Health, Safety and Welfare) Regulations 1992 recommends that "floors should be suitable, in good condition and free of obstructions. Traffic routes should be organised so that people can circulate safely". Trailing cables should be avoided, and where appropriate the use of cable ducts can help to securely fix cables and prevent accidents, whilst also preventing damage to vital cables.

Visit: www.gradus.com to download: AutoCAD drawings, Gradus & NBS Specifications, Cleaning & Maintenance, Installation Guidelines and Health & Safety Data Sheets.

## **Profile Information**

- Reduces the risk of accidents for pedestrian traffic by providing a safe link between floorcoverings
- Ideal for use in typical office environments, cable ducts can either be set in to the carpet to achieve a flush finish (TD series) or fitted on top of the floorcovering (RD series and CD), ideal where a semi-permanent solution is required. All cable duct profiles, with the exception of CD65 (a one-piece flexible profile), are supplied as separate tops and bases manufactured from PVC-u which clip together to form the cable duct
- Suitable for interior use
- Choice of 4 colours
- Suitable for most light to medium pedestrian traffic applications e.g. offices

## **Installation Advice**

• Examples of typical installations using Cable Ducts are shown on the opposite page



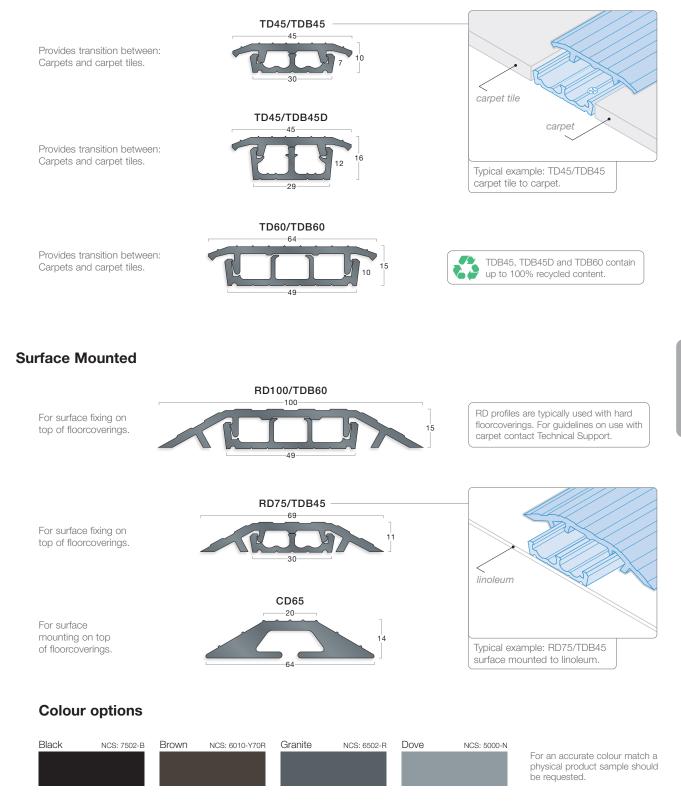
All Gradus products comply with REACH Regulation (EC) 1907-2006 - see page 4 for further details.

## **Cable Ducts - Cable Management**

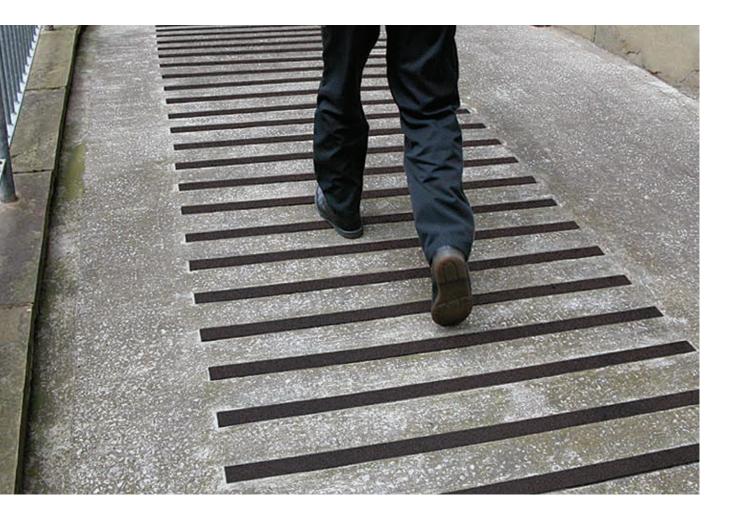
- <b>i</b> -		
Tops	RD and TD series PVC-u; CD series pvc	
Bases	PVC-u	
Application	Most interior environments. Suitable for light to medium traffic	The second se
Profiles	Dimensions shown are nominal. Illustrations are 70% size in mm. Products subject to minor design alterations without notice.	and walker



## Flush Finish (set in to carpet)



## Safety Track<sup>™</sup> - Slip-Resistant Finish



## Description

Safety Track<sup>™</sup> is a slip-resistant surface finish that can be used on ramps, walkways or anywhere where a risk of slip exists. Safety Track consists of a silicone carbide resin carrier with a self adhesive backing.

#### **Availability**

- Available in wide choice of sizes and configurations including rolls, cleats, tiles and stair treads
- Rolls are available to be cut to bespoke sizes. Cleats, tiles and stair treads are supplied cut to size with radius corners

Roll Size	25mm x 18m	1" x 60'
	51mm x 18m	2" x 60'
	102mm x 18m	4" × 60'
	153mm x 18m	6" x 60'
	305mm x 18m	12" x 60'
	609mm x 18m	24" x 60'
Cleats	153mm x 609mm	6" x 24"
Tiles	140mm x 140mm	5½" x 5½"
Stair Treads	20mm x 609mm	¾" x 24"
Primer	One Litre Tin	
Edge Fix	Tube (5oz)	

## Information

- Suitable for interior and exterior use
- Resistant to most common chemicals
- Suitable for use on most substrates including concrete, stone, terrazzo, wood etc. (surfaces should be primed prior to application with Safety Track primer)
- Available in Black (LRV: 4.58)
- Ideal for use on:
  - Ramps Plant and Machinery
  - Walkways Emergency Service Vehicles
  - Gantries Commercial and Agricultural Vehicles
  - Landings Marine Decking

## Installation Advice

- Surfaces must be fully prepared; clean, flat, even and free from any oil, moisture or dust
- Primer is available in 1 litre tins (approximate coverage 5sq/m per tin) to assist with surface preparation.
   Where there is a danger of water penetration e.g. outdoor locations or other wet areas the use of Edge Fix sealant is recommended. Edge Fix sealant is supplied in 5oz tubes.
   Maximum adhesive strength is reached after 48 hours. Safety Track should not be installed at temperatures below 5°<sup>c</sup>
- On steps, apply Safety Track 12mm to 15mm from the step edge to prevent edge curl and premature wear.

# **Section 5**

# Appendix

The Gradus Guarantee	14:
----------------------	-----

Testing	143
Cleaning & Maintenance	143

## **Specification Guidelines**

Colour & Contrast / Light Reflectance Values

Project Rainbow	144
BS 8300-2:2018 and	
The Building Regulations 2010: Approved Document M	144
Light Reflectance Values (LRVs) explained	145
How to Measure LRVs	145
What the colour & contrast guidelines mean for	
Gradus flooring accessories	145
Guide to matching PVC-u Hardnose™	
channel to insert colours for visual contrast	146

The Building Regulations and British Standards specifying the right Gradus product

BS 8300-2:2018	146
BS 9266:2013	148
The Building Regulations 2010 - Approved Document K	149
The Building Regulations 2010 - Approved Document M	150
BS 5395-1:2010	151
UK Slip Resistance Group	151
BRE Information Paper IP15/03 - Research and Guidelines	152

## **Useful Information**

The Gradus Knowledge	153
Other products in the Gradus range	155
Product Index	156



# **The Gradus Guarantee**

All Gradus products are designed to meet the latest UK building regulations. Accessibility to buildings, as well as the provision of an inclusive environment for all, is now a requirement of The Building Regulations (ADM & ADK), BS 8300-2:2018, BS 9266:2013 & BS 5395-1:2010. Gradus actively seeks the advice of RNIB Access Consultancy Services and The Centre For Accessible Environments, and has consulted directly with Communities & Local Government (formerly the Office of the Deputy Prime Minister). Gradus is confident that all stair edgings, pvc skirtings and transition strips meet the necessary standards and, as such, building owners and specifiers can use Gradus Accessories with confidence.

# Testing

- All inserts are tested for: Slip-resistance, surface roughness, chemical and bacterial/fungal resistance
- Wear test independently carried out by SATRA using the Taber Abrader Method and classified in accordance with the results shown in Figure 1
- Slip-resistance tests have been undertaken using the pendulum tester (see Figure 2). All Gradus inserts achieve a PTV of >36 to
  offer a low risk of slip (see Figure 1).

	Composition	Environment	Slip Potential	Stair Edging Compatibility		
Xtra-grip & Xtra-grip Plus	Pvc with Mineral Aggregate	Interior Dry or Wet	Dry Conditions Low Wet Conditions Low	Aluminium, Bronze, PVC-u		
	, iggi ogalo	Conditions		XT & Traditional		
Interior	Pvc with Natural	Interior Dry	Dry Conditions Low	Aluminium, Bronze, PVC-u		
	Mineral Fillers	Conditions	Bry Contaitionic Low	XT, Traditional & Elite		
Standard	Glass Reinforced	Internal or External	Dry Conditions Low	Aluminium, Bronze		
Exterior	Polyester with Fused Alumina	Conditions	Wet Conditions Low	Traditional		
Heavy-Duty	Glass Reinforced Polyester with Fused	Internal or External	Dry Conditions Low	Aluminium		
Exterior	Alumina	Conditions	Wet Conditions Low	Trans-Edge TEX		
Stairtile	Rubber Composite Internal or External Dry Conditions Low			n/a		
	with Aggregate Fillers	Conditions	Wet Conditions Low	Tird .		
	Xtra-grip, Xtra-grip Plus Group T – Class 34 – C Group T – Class 43 – Li	ommercial Very He		s of:		
Wear Classification *	* Stairtile and Interior (standard, grained, Elite) tested to BS EN 660-2:1999 and assessed against the requirements of BS EN 649:1997. Xtra-grip and Xtra-grip Plus tested to BS EN 13845:2005 – 50,000 cycles.					
	Heavy Duty Exterior and Standard Exterior - accelerated wear test using a SATRA Pedatron					

#### Figure 2.

Pendulum Test Value (PTV)	Slip Potential
0 - 24	High Slip Potential
25 - 35	Moderate Slip Potential
36+	Low Slip Potential

BS 8300-2:2018 - a PTV of at least 36 is required irrespective of wet or dry conditions (see page 147)

# **Cleaning & Maintenance**

A planned cleaning and maintenance programme is crucial to help maintain the performance and visual appearance of Gradus stair edgings and to maximise the lifespan of the products. Trained cleaning staff or a reputable contract cleaner should be used.

Gradus has worked with Selden Research to undertake extensive testing on all Gradus stair edgings. As a result, the method of cleaning and a range of cleaning products have been recommended for use with Gradus stair edgings in a variety of environments.

Cleaning and maintenance information for all Gradus stair edgings is available from: www.gradus.com

For further information about recommended cleaning products, including instructions for use and COSHH data sheets, contact:

Selden Research Limited, Staden Business Park, Buxton, Derbyshire SK17 9RZ Tel: 01298 26226 Email: gradus@selden.co.uk Website: www.selden.co.uk

## **Specification Guidelines**

## **Colour & Contrast / Light Reflectance Values**

Colour and contrast within the built environment affects accessibility of all building users, in particular those with a visual impairment.

## **Project Rainbow**

A research project carried out by Reading University in conjunction with the Royal National Institute of Blind People (RNIB), The Guide Dogs for the Blind Association (GDBA) and ICI Paints first examined the use of colour contrast to aid navigation around the building and identified that highlighting critical surfaces and special features can provide the basis for wayfinding for visually impaired people. The 'Colour Contrast & Perception' document produced by Reading University uses light reflectance values (LRVs) to measure colour and contrast in products/surfaces and determines whether or not a suitable contrast has been achieved between surfaces.

The findings from Project Rainbow identified the following:

#### **Special Features:**

Identified as areas that need to be highlighted to allow a building to be used effectively by visually impaired people, i.e. stair edgings, handrails and door opening furniture.

'Special features are additional areas, smaller that critical features, that need to be highlighted to allow the building to be used more easily by visually impaired people. Such features include sanitary ware, handrails, door handles, finger plates, switches, socket outlets, and stair nosing etc, all of which should be contrasted against the background against which they will be seen. Smaller items such as these will need a greater colour difference from their surroundings in order to be identified.'

#### Trim:

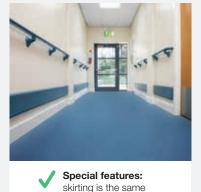
'Special attention is needed to those items used in an internal environment to improve the decorative appeal and overall finish of an interior. Such items, which include coving, skirting, architrave, dado rail etc, should be decorated in colours used on larger critical surfaces.'



Critical surface: patterned carpet and no stair edgings - staircase looks like a ramp



Special features: stair edgings are a different colour and luminance to the flooring to define step edges



colour as the wall

## BS 8300-2:2018 and The Building Regulations 2010: Approved Document M

British Standard BS 8300-2:2018 states that light reflectance values (LRVs) are used to assess visual contrast using the method of measurement detailed in BS 8493:2008+A1:2010. Approved Documents M (ADM) & K (ADK) directly refers to colour and contrast in the definitions section, stating:

'Contrast visually, when used to indicate the visual perception of one element of the building, or fitting within the building, against another means that the difference in light reflectance value between the two surfaces is greater than 30 points.'

ADM then refers to Colour, Contrast & Perception - Design Guidance for Internal Built Environments, Reading University (Project Rainbow).

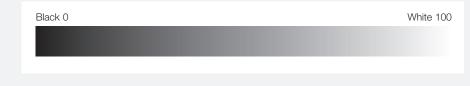
## Light Reflectance Values (LRVs) explained

Reflectance is the proportion of light that a surface reflects compared to the amount of light that falls on the surface. An LRV is a value given to a surface to denote the amount of light reflected. Therefore, as many people with a visual impairment can perceive light and dark, LRVs are a suitable method to measure contrast.

LRVs are marked on a scale of 1 to 100 depending on the percentage of light reflected. Dark, matt and/or textured surfaces absorb a large amount of light and, therefore, have low reflectance values. On the other hand, light, glossy and/or smooth surfaces reflect the majority of light that falls on them and have high reflectance values.

#### **Light Reflectance Scale**

In order to achieve a suitable contrast between different surfaces, Project Rainbow and ADM recommend that there is at least a 30 point (not 30%) difference in the LRVs of the two surfaces.



## How to Measure LRVs

The British Standard BS 8493:2008+A1:2010 specifies the method of test to determine the light reflectance value (LRV) of different surfaces of materials, including preparation of specimens in standardised conditions and results put into a test report. All relevant Gradus products have been measured using the CIE Y value and a test report is available upon request.

Previous to this standard being published, two widely used methods of measurement had been used - the CIE L value (fluorescent light) and the CIE Y value (natural daylight), causing confusion and potentially dangerous specifications. This standard has adopted the CIE Y value as the single consistent method of measurement for LRVs that is to be used across all industries.

# What the colour & contrast guidelines mean for Gradus flooring accessories:

#### **Stair Edgings**

BS 8300-2:2018: 'Each step nosing should incorporate a durable permanently contrasting continuous material for the full width of the stair on both the tread and the riser to help people who are blind or partially sighted appreciate the extent of the stair and identify individual treads. The contrasting material should extend 50mm to 65mm in width from the front edge of the tread and 30mm to 55mm from the top of the riser, and should contrast visually with the remainder of the tread and riser.'

ADM: 'All nosings are made apparent by means of a permanently contrasting material 55mm wide on both the tread and the riser.'

Colour, Contrast & Perception (Project Rainbow): 'The nosing of every step in a flight of stairs should be adequately colour or luminance contrasted with the remainder of the step and the floor coverings adjacent to the top and bottom of the flight.'

#### Skirtings

BS 8300-2:2018: 'To avoid giving the wrong impression about the size of a room, skirtings should have the same LRV as the wall so that the junction between the skirting and the floor marks the extent of the room.'

Colour, Contrast & Perception (Project Rainbow): 'Skirting should be either decorated the same colour as the wall, the same colour as the floor or, if different to one or the other or both, must be decorated in a colour which highlights even further the junction.'

Permission to reproduce extracts from British Standards is granted by BSI Standards Ltd (BSI). No other use of this material is permitted. British Standards can be obtained in PDF or hard copy formats from the BSI online shop: www.bsigroup.com/Shop

# Guide to matching PVC-u Hardnose<sup>™</sup> channel to insert colours for visual contrast

HARDNOSE™		INSERT AVAILABILITY							
CHANNEL	LRV	Xtra-grip	LRV	Xtra-grip Plus	LRV	Interior Standar	d LRV	Interior Grained	LRV
Black	4.99	Onyx	4.52	Asphalt	4.52	Jet	4.56	Black	6.47
Ink	5.40	Neptune	5.03	Shark	5.03	Ink	4.96	-	-
Burgundy	5.89	-	-	-	-	Burgundy	5.70	-	-
Evergreen	6.63	-	-	-	-	Evergreen	6.69	-	-
Midnight	6.77	-	-	-	-	Midnight	6.56	-	-
Brown	7.15	Umber	5.71	Bark	5.71	Coffee	6.05	Brown	12.13
Bluebell	9.76	-	-	-	-	Ocean	8.00	-	-
Granite	11.69	Graphite	12.56	Mercury	12.56	Lead	12.77	Granite	13.44
Dove	26.19	Quarry	24.71	Smoke	24.71	Steel	26.99	Dove	23.40
Linen	37.50	-	-	-	-	Linen	38.59	-	-
Glacier	42.73	Concrete	37.44	Dusk	37.44	Glacier	42.09	-	-
Clay	51.53	-	-	-	-	Clay	47.97	-	-
Sky	55.38	Surf	43.58	Air	43.58	Sky	52.63	-	-
Canvas	55.43	Pumice	46.83	Sandstone	46.83	Canvas	53.27	-	-
Jade	55.54	Bamboo	45.84	Prairie	45.84	Jade	53.98	-	-
Wisp	56.62	-	-	-	-	Wisp	58.17	-	-
Buttercup	62.62	Ochre	49.97	Citrine	49.97	Buttercup	55.54	-	-
Snowdrift	80.54	Frost	66.51	Calcite	66.51	Snowdrift	83.77	-	-

## **Specification Guidelines**

# The Building Regulations and British Standards specifying the right Gradus product

The Building Regulations and British Standards are designed to ensure the optimum specification of products through a combination of legislative requirements and guidance. The following extracts have been taken from The Building Regulations 2010 and British Standard BS 8300-2:2018, BS 9266:2013, BS 5395-1:2010 and show how Gradus products can be used to help satisfy these requirements, and help achieve an inclusive environment in line with the Equality Act 2010. For further details on this or any other aspect of The Building Regulations and British Standards contact Gradus Technical Services on 01625 428922. Guidance varies internationally, please refer to the relevant countries' building standards (or equivalent) before specification. Extracts shown below represent examples of good practice.

## BS 8300-2:2018

Design of an accessible and inclusive built environment Part 2 : Buildings - code of practice

## **Guidance on Stair Edgings**

- 10 Vertical movement
- 10.1 Steps and stairs

#### 10.1.4 Identification and slip resistance of nosings

Each step nosing should incorporate a durable, permanently contrasting continuous material for the full width of the stair on both the tread and the riser to help people who are blind or partially sighted appreciate the extent of the stair and identify individual treads **1**. The contrasting material should extend 50 mm to 65 mm in width from the front edge of the tread and 30mm to 55mm from the top of the riser, and should contrast visually with the remainder of the tread and riser **2**.

NOTE 1 Particular care is needed to ensure that there is adequate contrast between nosings and landings 0.

NOTE 2 Nosing that wraps around the riser might assist people who are blind or partially sighted 3.

NOTE 3 A proprietary nosing can provide a durable solution that satisfies both visual contrast and slip resistance criteria (see BRE IP 15/03).

The whole tread or the nosing should incorporate a slip-resistant material.

NOTE 4 Guidance on slip resistance of surfaces is given in Annex C.

Surface material tread and risers should be free from patterning.

NOTE 5 It is beneficial that surface material at landings and floors contrasts with surface material of stairs, subject to maintaining visual contrast at top and bottom nosings.

• All Gradus stair edging colours have been measured to provide Light Reflectance Values (LRVs)\* in order to provide the specifier with information to ensure that suitable contrast is achieved with the surrounding stair material. PVC-u Hardnose stair edgings can provide an ideal solution as channel and insert colours can be matched to contrast with the tread and riser (see pages 40 to 45).

\* These values have been determined using the CIE Y value, in accordance with BS 8493:2008+A1:2010 – see pages 144 to 145 for further details.

**2** The profile dimensions stated are guidance only and other factors should be taken into consideration when specifying stair edgings such as step dimension and type and frequency of traffic. However, a large proportion of Gradus stair edgings fall between the dimensions stated, including the XT range (see pages 21 to 22 and 41 to 42).

**9** The XT range of stair edgings features a slip-resistant PVC insert that extends around the leading edge of the profile to ensure that foot contact is always made with the slip-resistant element of the stair edging, providing the ideal solution for reducing the risk of slips, trips and falls on stairs in line with BRE recommendations. The XT range is available in aluminium (see pages 21 to 22) and PVC-u Hardnose (see pages 41 to 42).

#### 10 Vertical movement

#### 10.1 Steps and stairs

#### 10.1.7 Surface materials

The surface materials used for internal steps and stairs should be chosen to be easy to maintain and as slip-resistant as possible, especially if surfaces are likely to become wet due to location or use, or if spillage occurs.

NOTE 1 Advice and further references on slip resistance of surfaces are given in Annex C.

A choice of slip-resistant insert materials is available for all Gradus stair edgings. Xtra-grip and Xtra-grip Plus inserts have been specifically designed to reduce the risk of slip in internal wet areas or where spillages are likely to occur (see page 14 for advice on specifying the most suitable insert).

#### Annex CSlip potential characteristics of treads, ramp surfaces and floor finishes

#### C.2 Slip resistance

The following indices are used to indicate the slipperiness of surfaces:

a) pendulum test values (PTVs) obtained using a pendulum tester in line with BS 7976-2;

b) surface micro roughness (Rz) measurements using a stylus instrument in accordance with BS 1134.

Detailed information on assessing slip resistance, together with a table illustrating common surface materials and their dry and wet slip resistance values (SRV), also known as pendulum test values (PTV), can be found in BS 5395-1:2010, Clause 7.

NOTE Depending on the precise nature of the wearing surface, seemingly similar products made from the same material can be totally different in terms of their slip potential characteristics.

#### C.4 Step nosings

Where slip resistance is required for nosings and treads, the slip resistance needs to be equivalent to that expected for level surfaces. A PTV greater than 36 is considered to be suitable, as pushing and turning are unlikely on stairs. On existing nosings, the slip resistance of step nosings are generally expressed by their Rz roughness value as PTV is difficult to measure. In such cases a roughness Rz value of 20 µm is considered to be suitable.

All Gradus stair edging inserts are tested for slip-resistance using the pendulum tester – all inserts have a low slip potential (inserts measured in dry conditions - PTV of >36; inserts measured in wet conditions – PTV of >36). All inserts are also tested for wear, surface roughness, chemical resistance and bacterial/fungal resistance (see page 143 for further details).

#### **Guidance on Skirtings**

#### 11 Surface finishes

#### 11.1 Visual characteristics

The LRV of a wall should be 30 points different from that of the ceiling and of the floor. To avoid giving the wrong impression about the size of a room, skirtings should have the same LRV as the wall so that the junction between the skirting and the floor marks the extent of the room, except where coved skirtings are used, where the skirting should have the same LRV as the floor and should extend not more than 100mm above finished floor level.

All Gradus skirting colours have been measured to provide Light Reflectance Values\* in order to provide the specifier with information to ensure that the skirting can be matched to the wall and contrast with the floor.

\* These values have been determined using the CIE Y value, in accordance with BS 8493:2008+A1:2010 – see pages 144 to 145 for further details.

Permission to reproduce extracts from British Standards is granted by BSI Standards Ltd (BSI). No other use of this material is permitted. British Standards can be obtained in PDF or hard copy formats from the BSI online shop: www.bsigroup.com/Shop

#### Design of accessible and adaptable general needs housing - Code of Practice.

The requirements of a dwelling's occupants can change as a result of accident, illness or ageing, giving rise to reduced mobility or increasing sensory loss. In order to meet these changing requirements, homes need to be accessible and adaptable; accessible for both visitors and residents and adaptable to meet residents' changing needs both temporary and longer term.

The standard outlines recommendations for design features which can be incorporated when the dwelling is first built, or have provision made at the outset for their future adaptation. This helps reduce the need for expensive or disruptive alterations or substantial adaptations in the future.

This British Standard gives recommendations for methods of selection, planning, installation and maintenance for both stair nosings and barrier matting. Gradus advice and recommendations are shown in blue text.

### **Guidance on Stair Edgings**

- 6 External access routes
- 6.8 Steps on access routes

#### 6.8.1 Stepped access routes to individual houses

All step nosings should incorporate a permanently contrasting continuous material for the full width of the stair on both the tread and the riser. The material should contrast visually with the remainder of the tread and riser **1**.

• All Gradus stair edging colours have been measured to provide Light Reflectance Values (LRVs)\* in order to provide the specifier with information to ensure that suitable contrast is achieved with the surrounding stair material. PVC-u Hardnose stair edgings (see pages 40 to 45) can provide an ideal solution for internal applications as channel and insert colours can be matched to contrast with the tread and riser \*These values have been determined using the CIE Y value, in accordance with BS 8493:2008+A1:2010 - see pages 144 to 145 for further details.

NOTE 2 A contrasting nosing at the junction between tread and riser might assist people with a visual impairment.

NOTE 3 Further information on the design of steps, and on visual contrast, refer to BS 8300:2009+A1:2010

#### 6.8.2 Stepped access routes to blocks of flats

All step nosings should incorporate a permanently contrasting continuous material for the full width of the stair on both the tread and the riser, to help people with a visual impairment appreciate the extent of the stair and identify individual treads **1**.

• All Gradus stair edging colours have been measured to provide Light Reflectance Values (LRVs)\* in order to provide the specifier with information to ensure that suitable contrast is achieved with the surrounding stair material. PVC-u Hardnose stair edgings (see pages 40 to 45) can provide an ideal solution for internal applications as channel and insert colours can be matched to contrast with the tread and riser \*These values have been determined using the CIE Y value, in accordance with BS 8493:2008+A1:2010 - see pages 144 to 145 for further details.

The material should be 50 mm to 65 mm wide on the tread and 30 mm to 55 mm on the riser, and should contrast visually with the remainder of the tread and riser 2.

<sup>2</sup> The profile dimensions stated are guidance only and other factors should be taken into consideration when specifying stair edgings such as step dimension and type and frequency of traffic. However, a large proportion of Gradus stair edgings fall between these dimensions stated, including the XT range (see pages 21 to 22 and 41 to 42) for internal use and the TEX range of heavy duty stair edgings (see page 33) suitable for external use.

The whole tread and the nosing should incorporate a slip-resistant material, starting as close as practicable to the front edge of the nosing and extending the full width and depth of the tread **3**.

**③** Gradus offer a Heavy-Duty Stair & Floor system suitable for heavy traffic exterior and interior environments (see page 35). The system features stair edgings and tread plates for use on stairs and sheet material for use as a floorcovering on landings and walkways to help reduce the risk of slips and trips in the most demanding environments.

NOTE 1 A proprietary nosing can provide a durable solution that satisfies both visual contrast and slip resistance criteria (see BRE IP 15/03 [12]).

NOTE 2 Further information on slip resistance is given in BS 8300:2009+A1:2010

#### 8 Communal areas within blocks of flats

#### 8.2 Design of common steps and stairs

The design of common steps and stairs should conform to 6.8.2

### Guidance on light reflectance values

#### 8.5 Visual contrast between surfaces or building elements

Differences in light reflectance value (LRV) should be used to assess the degree of visual contrast between surfaces such as floors, walls, doors and ceilings, and between key fittings/fixtures and surrounding surfaces.

NOTE Relevant LRV differentials and methods of LRV measurement are provided in BS 8300:2009+A1:2010, Annex B.

Visual contrast is used to indicate the visual perception of one element of the building, or fitting within the building, against another to ensure the difference in light reflectance value between the two surfaces is greater than 30 points. All Gradus stair edging colours have been measured to provide Light Reflectance Values\* in order to provide the specifier with information to ensure that suitable contrast is achieved with the surrounding stair material. \*These values have been determined using the CIE Y value, in accordance with BS 8493:2008 - see pages 144 to 145 for further details.

Permission to reproduce extracts from British Standards is granted by BSI Standards Limited (BSI). No other use of this material is permitted. British Standards can be obtained in PDF or hard copy formats from the BSI online shop: www.bsigroup.com/Shop or by contacting BSI Customer Services for hard copies only: Tel: +44 (0) 845 086 9001, Email: cservices@bsigroup.com

## The Building Regulations 2010 - Approved Document K 2013 edition

#### Protection from falling, collision and impact

This approved document takes effect on 6th April 2013 for use in England. Current building standards should be checked at time of specification for Wales, Scotland and Northern Ireland.

Approved documents are intended to provide guidance. The main points relating to stairs that are detailed in Approved Document K are shown below with supporting recommendations by Gradus shown in blue text.

## K1 Stairs and ladders

### **Construction of steps**

### For buildings other than dwellings

1-7 For steps apply the following guidance.

a. Make step nosings apparent: use material that will contrast visually, a minimum of 55mm wide, on both the tread and the riser.

### For common access areas in buildings that contain flats

1-10 Provide a stair with steps that comply with the following guidance.

a. Make step nosings apparent: use material that will contrast visually, 50mm to 65mm wide on the tread and 30mm to 55mm on the riser.

All Gradus stair edging colours have been measured to provide Light Reflectance Values (LRVs)\* in order to provide the specifier with information to ensure that suitable contrast is achieved with the surrounding stair material. PVC-u Hardnose stair edgings can provide an ideal solution as the channel and insert colours can be matched to contrast with the tread and riser (see pages 40 to 45).

\*These values have been determined using the CIE Y value in accordance with BS 8493:2008+A1:2010 - see pages 144 to 145 for further details.

The profile dimensions stated are guidance only and other factors should be taken into consideration when specifying stair edgings such as step dimension and type and frequency of traffic. However, a large proportion of Gradus stair edgings fall within the dimensions stated, including the XT range (see pages 21 to 22 and 41 to 42).

Source: Building Regulations - Protection from falling, collision and impact - Approved Document K - 2013 Edition. Crown Copyright material is reproduced with the permission of the Controller of HMSO and the Queen's Printer for Scotland.

# The Building Regulations 2010 - Approved Document M "Access to and use of buildings"

#### (2015 edition incorporating 2016 amendments - for use in England)

The latest version of Approved Document M is stated 'for use in England'. Current building standards should be checked at time of specification for Wales, Scotland and Northern Ireland.

Approved Document M is split into two parts:

- Volume 1: Dwellings
- Volume 2: Buildings other than dwellings

Volume 1 refers to Approved Document K for specific guidance notes on stair edgings (detailed on page 149). The below abstracts of guidance are taken from Volume 2.

Building owners have a legal duty to ensure all people can gain access to and use a building and its facilities.

Approved documents are intended to provide guidance and much of the guidance in Approved Document M is based on BS 8300. The main points relating to stair and stepped access that are detailed in Approved Document M are shown below, with supporting recommendation by Gradus shown in blue text.

### **Stepped Access**

1-27 People with impaired sight risk tripping or losing their balance if there is no warning that steps provide a change in level.

Use of a stair edging that contrasts with the surrounding tread/riser material will help to clearly define the step edge and warn of a change in level.

1-29 Materials for treads should not present a slip hazard, especially when the surface is wet.

Gradus provides a range of inserts for use in interior (dry and wet) and exterior conditions (see page 14).

1-30 People should easily be able to appreciate where to place their feet by highlighting nosings and avoiding open rises.

Use of a stair edging that contrasts with the surrounding tread/riser material will help to clearly define the step edge. Both the insert and channel of the stair edging should be of a suitable contrast to the surrounding floor finishes. ADM directly refers to colour contrast in the definitions section stating that:

'Contrast visually, when used to indicate the visual perception of one element of a building, or fitting within the building, against another means that the difference in light reflectance value between the two surfaces is greater than 30 points.'

All Gradus stair edging colours have been measured to provide Light Reflectance Values\* in order to provide the specifier with information to ensure that suitable contrast is achieved with the surrounding stair material.

\*These values have been measured using the CIE Y value in accordance with BS 8493:2008+A1:2010. See pages 144 to 145 for further details

1-33 (i) All nosings are made apparent by means of a permanently contrasting material 55mm wide on both the tread and the riser.

The 55mm dimension detailed is guidance only and other factors should be taken into consideration when specifying stair edgings such as step dimension, type and frequency of traffic. Communities and Local Government (formerly The Office of the Deputy Prime Minister) also acknowledges that advice given by other expert bodies should be taken into consideration, for example the RNIB Access Consultancy Services who state that the ideal dimension for a stair edging is 55mm on the tread and 30-50mm on the riser, which takes into account lower risers where a 55mm stair edging may take up a large proportion of the riser surface and therefore could be confusing for partially sighted people. If 55mm profiles are required they are available in the Gradus range (see pages 21, 25, 28, 33, 41, 42 and 43).

### **Entrance Lobbies**

2-29 (e) floor surface materials within the lobby do not impede the movement of wheelchairs e.g. not coir matting, and changes in floor materials do not create a potential trip hazard.

The majority of Gradus mats are suitable for use with wheelchairs.

2-29 (f) the floor surface helps to remove rainwater from shoes and wheelchairs.

A combination of Gradus primary and secondary barrier matting will help prevent the ingress of rainwater.

2-29 (g) where matwells are provided, the surface of the mat is level with the surface of the adjacent floor finish.

Gradus offers a range of matwell frames and primary barrier mats designed to work together to provide a smooth transition to the surrounding floor finish.

### **Corridors and Passageways**

3-12 In order to help people with visual impairment to appreciate the size of a space they have entered, or to find their way around, there should be a visual contrast between the wall and floor.

Gradus skirting profiles are available in a wide choice of colours and will provide a suitable colour contrast, helping define where the floor ends and the wall begins.

Source: Building Regulations - Access to and use of buildings - Approved Document M - 2004 Edition incorporating 2010 and 2013 amendments. Crown Copyright material is reproduced with the permission of the Controller of HMSO and the Queen's Printer for Scotland.

#### Stairs – Part 1:

#### Code of practice for the design of stairs with straight flights and winders

This standard provides guidance or good practice in the design of stairs with straight flights and winders. Gradus advice and recommendations are shown in blue text

#### 4 Safety

#### 4.7 Marked nosings

On a normal-use stair, each step or landing nosing should incorporate a permanently contrasting material for the full width of the stair on both the tread and the riser to help blind and partially sighted people appreciate the extent of the stair and identify individual treads. The material should be 50 mm to 65 mm wide on the tread and 30 mm to 55 mm on the riser, and should contrast visually with the remainder of the tread and riser.

NOTE Advice on visual contrast can be found in BS 8300:2009, Annex B.

All Gradus stair edging colours have been measured to provide Light Reflectance Values (LRVs)\* in order to provide the specifier with information to ensure that suitable contrast is achieved with the surrounding stair material. PVC-u Hardnose stair edgings can provide an ideal solution as channel and insert colours can be matched to contrast with the tread and riser (see pages 40 to 45.

\*These values have been determined using the CIE Y value, in accordance with BS 8493:2008+A1:2010 – see pages 144 to 145 for further details.

The profile dimensions stated are guidance only and other factors should be taken into consideration when specifying stair edgings such as step dimension and type and frequency of traffic. However, a large proportion of Gradus stair edgings fall between these dimensions stated, including the XT range (see pages 21 to 22 and 41 to 42).

#### 7 Slip resistance

Treads and landings should have a surface (and proprietary nosing, if provided) that does not become slippery in use.

Assessments in slip resistance should be undertaken using a combination of the following:

a) Pendulum test value (PTVs) obtained using a pendulum tester in line with BS 7976-2; and

b) Surface micro roughness measurements using a stylus instrument in accordance with BS 1134-1.

NOTE 1 Attention is drawn to the information found in the UK Slip Resistance Group Guidelines [6].

NOTE 2 Any flooring material providing sufficient slip resistance for use on the level, typically with a PTV greater than 36, is suitable for use on stairs.

PTV should be measured in the conditions to which the stair is likely to be exposed.

If strips or inserts are used to improve the slip resistance of steps and stairs, they should be fitted as close possible to the leading edge of the tread and should be of a contrasting colour/brightness. An Rz roughness of 20 um or more is recommended. Such strips or inserts should be firmly fixed.

NOTE 9 For further information on proprietary nosings see BRE IP 15/03 [7].

All Gradus stair edging inserts are tested for slip-resistance using the pendulum tester – all inserts have a low slip potential (inserts measured in dry conditions - PTV >36; inserts measured in wet conditions – PTV >36). All inserts are also tested for wear, surface roughness, chemical resistance and bacterial/fungal resistance (see page 143 for further details).

The XT range of stair edgings features a slip-resistant pvc insert that extends around the leading edge of the profile to ensure that foot contact is always made with the slip-resistant element of the stair edging, providing the ideal solution for reducing the risk of slips, trips and falls on stairs in line with BRE. The XT range is available in aluminium (see pages 21 to 22) and PVC-u Hardnose (see pages 41 to 42).

Permission to reproduce extracts from British Standards is granted by BSI Standards Ltd (BSI). No other use of this material is permitted. British Standards can be obtained in PDF or hard copy formats from the BSI online shop: www.bsigroup.com/Shop

# **UK Slip Resistance Group**



Gradus is a key contributor to the UK Slip Resistance Group, the leading independent authority on slip resistance in the UK that aims to promote greater understanding of the causes of and solutions to slips.

A new guide is now available entitled "What Makes Stairs Safer?" that offers an overview of the key aspects involved in creating safe internal stairs and aims to provide valuable, independent advice to anyone involved in the design, specification, construction, installation, fitting or maintenance of stairs.

For more information and to keep up-to-date with the latest developments, visit: www.ukslipresistance.org.uk

## **BRE - Research and Guidelines**

BRE has published an information paper (ref. IP15/03) entitled "Proprietary nosings for non-domestic stairs". This paper provides guidance to designers and building managers on the best way to assess the types of proprietary nosings that should be provided on non-domestic stairs.

Gradus has combined the key findings of this report with in-house research and development, and as a result has developed the XT range of profiles.

Detailed below is an overview and summary of the key findings in the BRE information paper.

## **Overview**

The study considered the dynamics of pedestrian stair use. Previous studies have shown that 80% of slips on stairs are likely to occur when users are descending the stairs. This usually occurs as a result of an overstep (i.e. when a substantial portion of the foot overhangs the tread). Therefore as the going (tread width) becomes narrower the likelihood of a slip incident becomes greater. Where the going is less than 300mm the risk of slip is increased. Most non-domestic stairs have a going of between 250mm and 280mm. The risk of slip is further increased if the tread surface is smooth, becomes wet or there is a lack of clear colour contrast at the step edge.

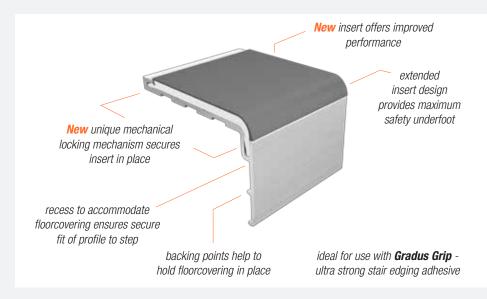
## Conclusion

The application of a proprietary nosing may reduce the risk of slipping against the factors highlighted above. The proprietary nosing should incorporate a slip-resistant material that should extend to the point at which it meets the vertical face to minimise the risk of slip in descent. Proprietary nosings should all offer a colour contrast to clearly highlight the step edge.



### **Gradus recommendation**

The XT range of stair edgings (see pages 21 to 22 and 41 to 42) offers a new edge in safety for stairs and has been developed to take into account the latest guidance contained in the BRE information paper IP15/03, BS 8300-2:2018 and in The Building Regulations 2010 - Approved Document M.



Extracts from BRE Information Paper IP15/03, Proprietary nosings for non-domestic stairs, copyright BRE, reproduced by permission. IP15/03 is available from IHS BRE Press, Bracknell RG12 8FB, www.ihsbrepress.com

# The **GRADUS** Knowledge

## CPD



A full range of RIBA assessed CPD seminars available covering specification, legislation, safety, performance and aesthetics. Gradus is one of the original members of the RIBA CPD Providers Network and currently offers a full range of RIBA assessed and approved CPD seminars covering:

- The Specification & Design Considerations of Stair Edgings
- The Specification & Design Considerations or Barrier Matting Systems
- The Specification & Design Considerations or Wall, Corner & Door Protection Systems

All seminars are part of the RIBA core curriculum syllabus and earn double CPD points for those attending the seminars. For further information contact Gradus Technical Support on 01625 428922 or use the Contact Us form on our website.

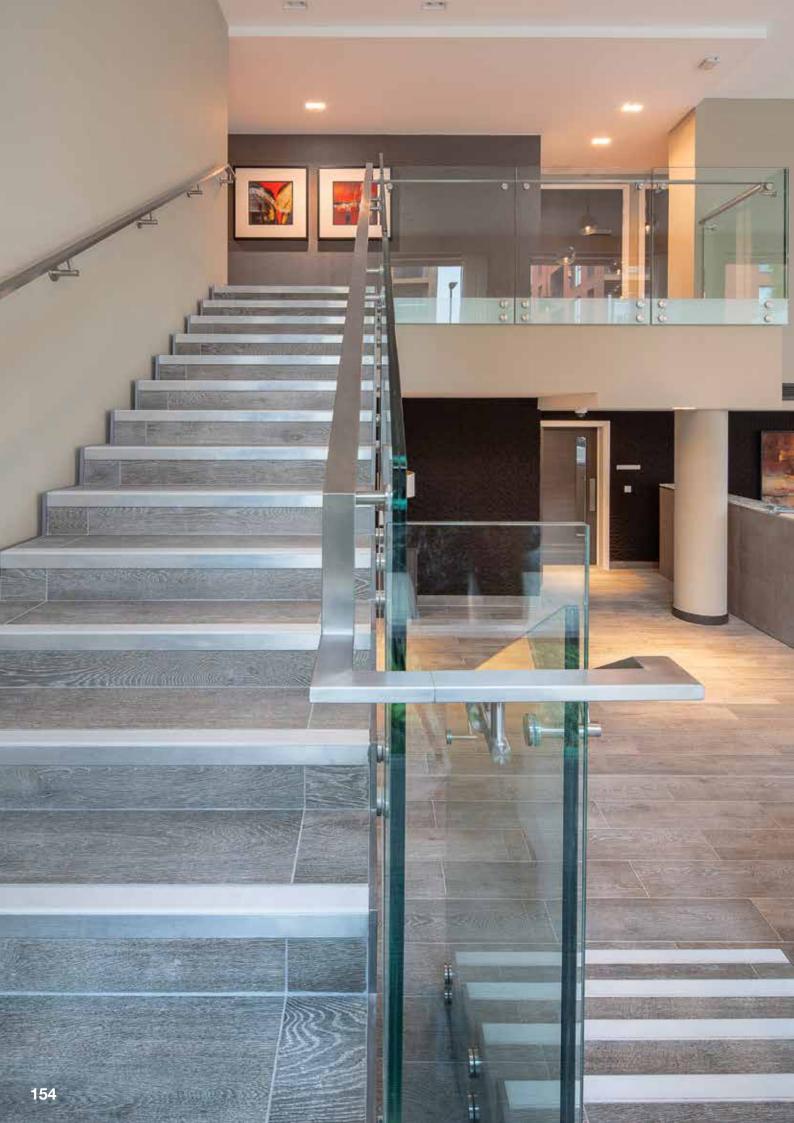
### Seminar



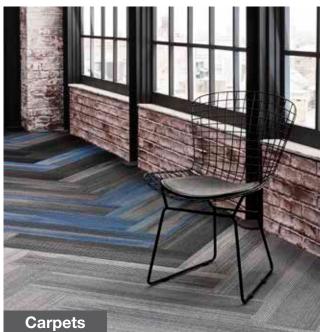
The Gradus Knowledge seminar is an informal opportunity for Gradus to bring an exhibition of products directly to you.

We have designed them to be flexible and informative and they can be arranged at a time and date to suit you. They typically last around 2 hours and in this time people drop in as they wish. Gradus personnel are available to discuss our products generally or address specific requirements.

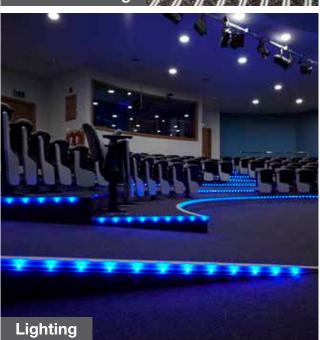
They are often booked over lunch time and we are happy to work with you to provide lunch or if you prefer a different time, a variety of snacks. Call to book your Gradus Knowledge seminar on 0800 021 4534 or email: imail@gradus.com



# **Other products** in the Gradus range











# Safety & Protection Systems

# **Product Index**

## Α

ACC40130
ACS3889
ACS441
ACS444
ACS462F3
ACS463F390
ACS470S90
10050 00
10710
10701
ACT6193
ACT8193
ADM125
ADM225
ADM3
ADM4
ADM5
ADM6
ADXT1
ADXT1R
ADXT3
ADXT422
AFT
AFT1272
AFT1372
AFT1472
AFT1571,72
AFT1771,72
AFII/
,
AFT2872
AFT28
AFT28
AFT28
AFT28       .72         AFT336       .74, 75         AFT339       .74, 75         AFT3312       .74, 75         AFT398       .65, 66
AFT28
AFT28       .72         AFT336       .74, 75         AFT339       .74, 75         AFT3312       .74, 75         AFT398       .65, 66         AFT3916       .65, 66         AFT3916       .71, 72         AFT708       .65         AFT7012       .66
AFT28       .72         AFT336       .74, 75         AFT339       .74, 75         AFT398       .65, 66         AFT3912       .65, 66         AFT3916       .65, 66         AFT708       .71, 72         AFT7012       .66         AFT7016
AFT28       .72         AFT336       .74, 75         AFT339       .74, 75         AFT3312       .74, 75         AFT398       .65, 66         AFT3912       .65, 66         AFT3916       .65, 66         AFT45       .71, 72         AFT708       .65         AFT7012       .66         AFT7016       .66         AJC465SF4       .90
AFT28       .72         AFT336       .74, 75         AFT339       .74, 75         AFT398       .65, 66         AFT3912       .65, 66         AFT3916       .65, 66         AFT45       .71, 72         AFT708       .65         AFT7012       .66         AFT7016       .66         AJC466SF4       .90
AFT28

AR7
AR8
AR81
AR81R26
ARXT81
ARXT81R21
AS126
AS1025
AS11
AS1106L51
AS12
AS1925
AS2
AS2025
AS21
ASRXT13
ASVXT1R
ASXT11
ASXT13
ASXT20
AT718L
ATB3369
ATD121L
ATD71L
ATF71L
ATNG71L
ATR4569
ATR5069
ATT42
AVR5020108

## В

BAR3
BAS1
BAS11
BAS20
BC717
BC78
BCS452F790
BCS454F790
BCS455F790
BCT16
BCT1894
BG511
BG532
BG551
BGR121
BT4255
BU200
BU80058, 109

# С

CA71
CC40130
CC75130
CCF 100 1129
CD65139
CET5111

CF20130
CF32P130
CF38130
CG1042
CR5117
CSI 100 50 2125
CSI 100 50 2.25 125
CSO 100 P127
CSO 60 P
CT52
CT71
CT712
CT717
CT727
CT75
CT78
CTR5107
CVA870IW104
CVA927104
CVT5107
CXT122
CXT222
CXT322

## D

DDA143
DDA243
DDA343
DDA443
DDXT141
DDXT241
DDXT342
DDXT442
DFS 100126
DFT72
DFT8071
DT50109

## Ε

EAR 11 4023
EAR 31 5023
EJC125108
EJC50108
EJC75108
EJC75 3.2108
ELA 11 4023
ELA 1155 50
ELA 117 50
ELA 12 40
ELA 127 4024
ELA 31 4024
ELA 32 40
ELA 51 4023
ELA 5155 50
ELA 517 5024
ELA 52 40
ELA 72 40
ELA 81 50

ELA 911 5024
ELA 931 50
ELACS504083
ELAF235051
ELAR155083
ELAR183083
ELAR53083
ELAR83083
ELAR95083
ELB 11 40
ELB 31 40
ET210113
ET210EBF4113
<b>FT10</b>
ET35693
ET356EBF493
ET359
ET359EBF493
ET367
ET804112
ET804EBF4112
ET805113
ET805EBF4113
ET806112
ET806EBF4112
ETR299F096
ETR300F096
ETR300GF097
ETR300UF096
ETR301F097
ETR301F7101
ETR301GF097
ETR301GF7101
ETR301GF8103
ETR301UF097
ETR302F097
ETR302F7101
ETR302GF7101
ETR302GF8103
ETR302UF097
ETR303F098
ETR303F7101
ETR303GF098
ETR303GF7101
ETR303GF8103
ETR303UF0
ETR304F098
ETR304F7102
ETR304GF099
ETR304GF8103
ETR304UF098

ETR305F0
ETR305F7102
ETR305GF099
ETR305GF7102
ETR305GF8103
ETR305UF0
ETR306F099
ETR306F7102
ETR306GF099
ETR306GF7102
ETR306GF8103
ETR306UF0
ETR307F097
ETR307F7101
ETR307GF098
ETR307GF7101
ETR307GF8103
ETR307UF0
ETR309F0100
ETR309F7102
ETR309GF0100
ETR309GF7102
ETR309GF8103
ETR309UF0100
ETR312F0100
ETR312GF0100
ETR312UF0100
_

# F

FCA16117
FRB02685
FS 100 2 P127
FS 100 B126
FS 150 B126
FS 303126
FS 303 P127
FS 75 2 P
FT2772
FXB33674,75
FXB33974,75
FXB331274,75
FXR4075
FXT2174
FXT31

# G

G11.								.28
G12.								.28
G317.								.29
G32.								.29
G33.								.29
G332.								.30
G41.								.28
G51.								.28
G52.								.28
G54.								.28
G65.								.29
G72.								.29

GC11
GC317
GC51
GCR81
Gradus Grip
GR12
GR3729
GR61
GR62
GR8
GR8129
GR91
GRXT8122
GT61M95
GT61R95
GXT1122
GXT1322
GXT5122
GXT5322

## Η

HCS48							129
HCS50							129
HD1							.27
HD2							.27
HE1							.27
HE2							.27
HM1							.27
HT38							.54
HT42							.55
HT44							.54
HT47							.54
HXT42.							.56
HXT44.							.56
HXT47.							.56

## 

INS12 .....117

## J

JC881025	91
JC881050	91
JT365	92
JT365EBF4	92
JT366	92
JT366EBF4	92

## Κ

KA386AS79
KA386XXL
KA57677
KA586H81
KA586LH81
KB387AS
KB387XXL
KB57777
KB587H81
KB587LH

KC388AS79
KC388XXL79
KC57877
KC588H81
KC588LH81

## Μ

MAS90/10SF	132
MAS90/6SF	132
MAS90/8SF	132
MAS95/10SF	133
MAS95/7SF	133
MAS97/8SF	133
MCC40	130
MCC75	130
MCS48	129
MJ301SF4	114
MJ301SF8	115
MJ302SF4	114
MJ302SF8	115
MJ303SF4	114
MJ304SF4	115
MJ305SF4	115
MJ306SF4	115
MJ307SF4	114
MJ307SF8	115
MPTB12	68
MPTB16	68
MPTB5	68
MR511	45
MR551	45
MR581	45
MR711	45
MR751	45
MR781	45

# 0

OT/D13	37
OT/F	37
OT/R10	37
OT/RDG10	37
_	
P	

MSS790/6SF.....132

MSS790/8SF.....132

PKS5047
PKS7547
PM6047
PR5047
PR6547
PR7547
PTR168
PTT168

# R

R75XT11								.42
R75XT51								.42
R95XT11								.42
R95XT51								.42
RAM012								.85
RD100								139
RD75								139
RMF60 .								.85
RN311								.44
RN351								.44
RN511								.44
RN527								.44
RN551								.44
RN581								.44
RN711								.44
RN727								.44
RN751								.44
RN781								.44
RNRC51	1							.43
RNT1218	3	L						.50
RNT718L	_							.50
RT245								106
RT247								106
RT250S.								106
RT264								106
RT265								106
RT330								106
RT35M .								.72
RT42								.72
RT52								.72
RXT1218	3L	_						.50
RXT311.								.41
RXT351.								.41
RXT511.								.41
RXT521.								.41
RXT525.								.41
RXT551.								.41
RXT581.								.41
RXT711.								.42

# S

Safety Track 140
SCS451SF8
SCS451SF8G
SCS454SF8
SCS454SF8G

RXT751.....42

RXT781.....42

SCS471SF887
SCS471SF8G87
SCS474SF8G
SCS475SF8G
SCSM451
SCSM454
SCSM45588
SCSM47187
SCSM474
SCSM475
SCSP45188
SCSP454
SCSP455
SCSP47187
SD127
SD227
SE127
SE227
SFBR3765
SFBT2965,66
SI 100
SI 100 32125
SI 100 50 2
SI 100 50 2 P127
SI 100 50 2.5125
SI 100 50 2.5 P 127
SI 100 50 3.2125
SI 100 50 3.2 P 127
SI 100 55125
SI 150
SI 150 50 2 P127
SM127
SO 100
SO 100 P127
SO 150
SO 25
SO 75
SO 75 P127
Stairtile Discs
STM 75 10123
STM 100 10123

## Т

T200	C									1(	)5
T250	C									1(	)5
T300	C									1(	)5
T450	C									1(	)7
T600	C									1(	)7
TA1										.{	54
TA16	6									1(	06
TA28	5									1(	)5
TA20	С									.5	54
TA42	2									.5	55
TA5										.5	54
TA50	C									.5	55
TA5E	З									.5	54
TA50	С									.5	54
TA6								5	8	9	95

#### TC47.....130 TC48.....130 TD45.....139 TD60.....139 TDB45.....139 TDB45D .....139 TDB60.....139 TH382.....111 TH383.....111 TH495.....111 TP290F4.....110 TP290F7 ..... 110 TP291F4.....110 TP293F4.....110 TP295F4.....110 TT25M.....72

# U

UMFA128	5
UMFA188	5
UMFA258	5

TT35.....71,72

W			
WTS1	 	 	 116
WTS2	 	 	 116
WTS3	 	 	 116

# GRADUS

Gradus Accessories Park Green Macclesfield Cheshire SK11 7LZ UK Tel: 01625 428922 For enquiries outside the UK and Eire contact Gradus International on +44 (0)1625 613780

Gradus International England Tel +44 (0) 1625 613780 Gradus Far East Singapore Tel: (+65) 6734 5933

# call: 01625 428922

# www.gradus.com



This catalogue supersedes and replaces all previous issues.

All designs, images and illustrations contained within this catalogue remain the copyright of Gradus Ltd.© All trademarks, product names and codes detailed within this catalogue are the property of Gradus Ltd.