

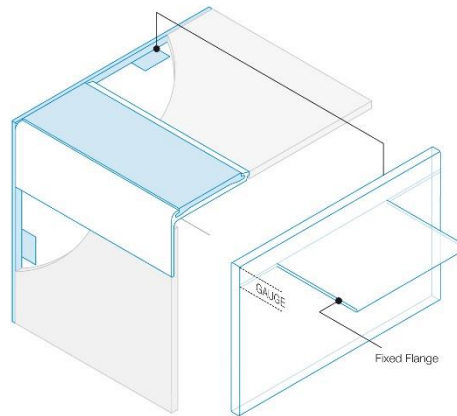
Fixed Flange Side Trims and Welded Corner and Side Trim – Aluminium and PVC

These installation guidelines apply to the following Gradus profiles:

TAXT5B, TA2C, TA1, TA5, TA5B, TA5C, HXT44, HXT47, HT38, HT44, HT47, TP32

Prior to installation, a full inspection of the substrate should be undertaken. The substrate should be flat, dry, clean and free from contaminants. The tread and riser of each step edge and landing area should be suitable to provide a good fixing for the adhesive bond of the welded corner or trimming strip.

Any proprietary work required to make good these areas should be carried prior to carrying out the installation of the welded corners or side trims.



1.



Ensure that the correct trim has been selected to meet the thickness of the floorcovering, including the riser of the stair edging.

Apply the pre-welded corners to the open string without applying any adhesive, taking care to align them correctly and taking into account the floorcovering and stair edging profile (1).

2.



Scribe and cut the back edge of each adjoining corner to form a butt joint (2).

De-burr the cut edges as required.

Tip: Take a small amount of the stair nosing and floorcovering to be installed and offer up to the welded corner to ensure that a neat finish is achieved on the tread and riser prior to fixing the welded corners.

3.



Working from the top tread, apply Gradus Grip **(3)** (or a proprietary cartridge adhesive – see page 10 for recommendations) in accordance with the manufacturer's instructions, to the back of the welded corner and the underside of the fixed flange and adhere to the face of the stringer (4).

Note: where angles on step risers vary slightly additional care should be taken when setting the welded corner into their final position. Failure to do so may result in the riser face of the stair nosing protruding beyond the edge of the welded corner.

4.



Ensure that the welded corners are fully bonded prior to installing the stair nosing and floorcoverings.

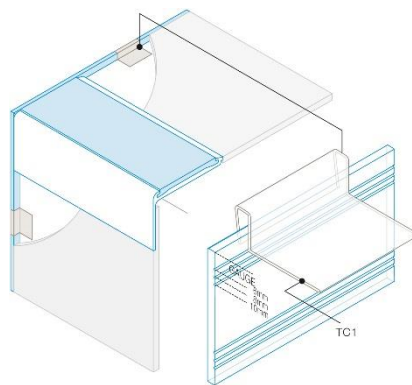
The fixed flange should be feathered out using a suitable smoothing compound prior to fitting the floorcovering.

Welded Corners with TC1 Clips

These installation guidelines apply to the following Gradus profiles:

HXT42, HT42, MT42, TAXT42, TA42, TAC42

Prior to installation, a full inspection of the substrate should be undertaken to identify any areas where making good is required. The substrate should be flat, dry, clean and free from contaminants. Serious undulations or irregularity must be made good before installation. Care should be taken to ensure the correct trim is chosen to meet the floorcovering thickness, including the riser of the stair edging.



1.



Ensure that the correct trim has been selected to meet the thickness of the floorcovering, including the riser of the stair edging.

Fit the TC1 clips to the profile (ensuring the correct height to match the floorcovering). Allow two TC1 clips for tread section and one TC1 clip for the riser section, dependent on side dimensions.

Apply the pre-welded corners to the open string without applying any adhesive, taking care to align them correctly and taking into account the floorcovering and stair edging profile (1).

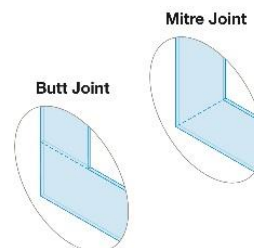
2.



Scribe and cut the back edge of each adjoining corner to form a butt joint (2). (Note: TAC42 requires a site cut mitre joint).

De-burr the cut edges as required.

Tip: Take a small amount of the stair edging and floorcovering to be installed and offer up to the welded corner to ensure a neat finish is achieved on the tread and riser prior to fixing the welded corners).



3.



Working from the top tread, apply Gradus Grip **(3)** (or a proprietary cartridge adhesive – see page 10 for recommendations) in accordance with the manufacturer's instructions to the back of the welded corner and adhere to the face of the stringer **(4)**.

Note: where angles on step risers vary slightly, additional care should be taken when setting the welded corners into their final position. Failure to do so may result in the riser face of the stair nosing protruding beyond the edge of the welded corner.

4.



Ensure that the welded corners are fully bonded before removing the TC1 clips and installing the stair edgings and floor coverings.



Welded Corners with TC2 Clips

These installation guidelines apply to the following Gradus profiles:

BT42, TA50, TA66

Prior to installation, a full inspection of the substrate should be undertaken to identify any areas where making good is required. The substrate should be flat, dry, clean and free from contaminants. Serious undulations or irregularity must be made good before installation.

1.

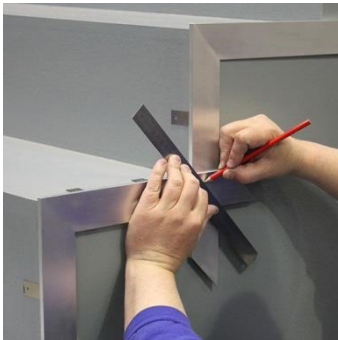


Ensure that the correct trim has been selected to meet the thickness of the floorcovering, including the riser of the stair edging.

Fit the clips to the profile and apply the pre-welded corners to the open string without applying any adhesive taking care to align them correctly and taking into account the floorcovering and stair edging profile.

Note: Allow two TC2 clips for tread section and one TC2 clip for the riser section, dependent on step dimensions. Secure the clips in place using a mechanical fixing to suit the substrate through the pre-formed holes. This holds the clips in position during the corner installation and will support the weight of the side trims while the adhesive cures. Ensure any mechanical fixings that have been used to hold them in place are removed prior to fixing the floorcovering.

2.



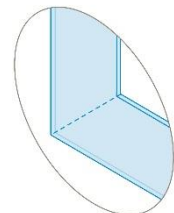
Scribe and cut the back edge of each adjoining corner to form a butt joint.

TA50, TA66 and BT42 require site cut mitre joints

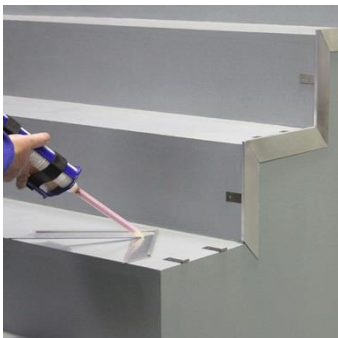
De-burr the cut edges as required.

Tip: Take a small amount of the stair edging and floorcovering and offer up to the step to ensure correct positioning.

Mitre Joint



3.



Working from the top tread, remove the welded corners (leaving the clips in place) and apply Gradus Grip (or a proprietary cartridge adhesive), in accordance with the manufacturer's instructions, to the back of the profile and adhere to the open string, using the clips to reposition them. See page 10 for adhesive guidance.

Note: where the angles on step risers vary slightly, additional care should be taken when setting the welded corners into their final position. Failure to do so may result in the riser face of the stair edging protruding beyond the edge of the welded corner.

4.



Ensure that the welded corners are fully bonded before installing the stair edgings and floorcoverings.

The TC2 clips remain in place and should be feathered out using a suitable smoothing compound. Ensure any mechanical fixings that have been used to hold them in place are removed prior to fixing the floorcovering.

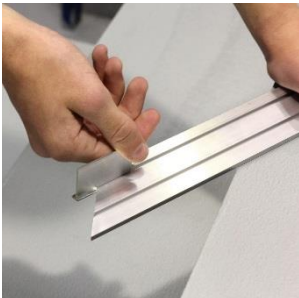
Welded Corners with TC3 Clips

These installation guidelines apply to the following Gradus profiles:

TAXT5212, TAXT5212, TAXT523

Prior to installation, a full inspection of the substrate should be undertaken. The substrate should be flat, dry, clean and free from contaminants. The tread and riser of each step edge and landing area should be suitable to provide a good fixing for the adhesive bond of the welded corner or trimming strip. Any proprietary work required to make good these areas should be carried out prior to carrying out the installation of the welded corners or side trims.

1.



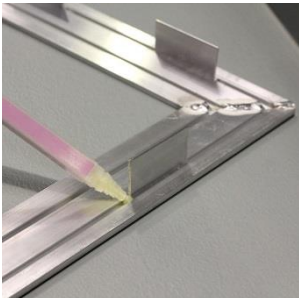
The welded corners can be set to accommodate the thickness of the floor finish to be installed by using the reversible TC3 Clip. The TC3 clips slide into the grooves on the reverse of the profiles **(1)**.

Ensure the TC3 clips are fitted to the correct height to match the floorcovering on the tread and riser allowing for the additional thickness of the stair nosing face.

Allow two TC3 clips for the tread section and one TC3 clip for the riser section, dependent on site dimensions.

When setting the TC3 clip into the riser of the welded corner take care to accommodate for the thickness of the floor finish plus the gauge of the stair edging to provide a neat clean edge where the stair nosing meets the welded corner.

2.



Tack the TC3 clips in position on the riser using a small amount of cartridge adhesive to keep them in place **(2)**.

Tip: Take a small amount of the stair nosing and floorcovering to be installed and offer up to the welded corner to ensure that a neat finish is achieved on the tread and riser prior to fixing the welded corners.

Ensure that prior installing welded corners where TAXT5212 or TAXT523 side trims are to be installed on landings, that heights are set to match and any joints can be neatly formed

3.



Apply the pre-welded corners to the open string without applying any adhesive taking care to align them correctly and taking into account the floorcovering and stair edging profile **(3)**.

4.



TAXT5212 and TAXT523 welded corners **MUST** be mitred.

Scribe and cut the back edge of each adjoining corner to form a mitre joint **(4)**.

De-burr cut edges the as required prior to installing the welded corners.

5.



Working from the top tread, apply a proprietary cartridge adhesive **(5)** (in accordance with the manufacturer's instructions – see page 10 for recommendations) to the back of the welded corner and the underside of the TC3 clips and adhere to the face of the stringer.

Note: Where angles on step risers vary slightly additional care should be taken when setting the welded corner into their final position. Failure to do so may result in the riser face of the stair nosing protruding beyond the edge of the welded corner.

6.



Ensure that the welded corners are fully bonded prior to installing the stair nosing and floorcoverings.

Side Trims Installed on Landings & Open Stairwells

When using trims on landings and open stairwells, trims should be fitted using the same methods as for welded angles and follow the same guidance for clips or fixed flanges where applicable. When using clips ensure a suitable number are used to achieve a secure fit during curing and use.

Horizontal joins should be butt jointed, corners can be mitred or butt jointed on internal and external corners dependent on the trim used.

Installation Guidelines

Side Trims & Welded Corners for Stairs

Data Sheet: Page 10 of 12 NF/LB 21.11.2017

Recommended adhesive products for side trims & welded corners

Gradus Limited provides this information only as guidance and the legal responsibility for the supply and performance of the adhesives listed below shall remain the sole responsibility of the relevant manufacturer.

By providing this information, Gradus Limited does not imply any equivalents between each of the different manufacturers' products, or that other products would prove unsatisfactory. However, use of adhesives not recommended by Gradus should be supported by a guarantee from the adhesive supplier.

Application of the named adhesive must be actioned in strict accordance with the relevant manufacturers' instructions. If you have any queries regarding adhesives, please contact the adhesive manufacturer directly.

Manufacturer	Product Reference	Contact number	Website
Gradus	Gradus Grip	+44 (0) 1625 428922	http://www.gradus.com
F. Ball and Co. Ltd	Stycco Flex	+44 (0) 1538 361 633	http://www.f-ball.co.uk/
Tremco	SP060 / MT440	+44 (0) 1942 251400	http://www.tremco-illbruck.co.uk/
UZIN	MS Structural	+44 (0) 1788 530 080	http://www.uzin.co.uk/

Gradus Grip – for use with Side Trims & Welded Corners

Gradus Grip data sheet applicable to the following products: TA2C, TA1, TA5, TA5B, TA5C, HT38, HT44, HT47, TP32, HT42, MT42, TA42, TAC42, TAXT5B, HXT44, HXT47, TAXT42, HXT42, TAXT5212, TAXT523, BT42, TA50, TA66

Site conditions vary - to ensure that this product is suitable and to confirm that this data sheet is current, contact Gradus Technical Support on 01625 428922.

Introduction

Gradus Grip is a rapid curing flexible adhesive with excellent gap filling properties that is suitable for bonding Gradus Stair Trims (Welded Corners) to most solid surfaces in internal environments.

Surface Preparation

Prior to application ensure that all surfaces are smooth, level, sound, clean and free of laitance, dust and contamination. If a levelling compound or repair mortar is required, ensure that the manufacturer's instructions are followed to ensure the material is ready to provide a level and strong surface. The product to be adhered should also be clean and free from contamination such as oil or grease, or anything else that may impair adhesion.

Suitable Substrates:*	Non-suitable Substrates:
Electroplated Metal	Weak, friable, dusty concrete/ screed etc
Concrete / Powerfloat	Asphalt / Bitumen
Floor Smoothing Compounds	Polyethylene / Polypropylene
Repair Mortars (Cement & Epoxy)	Oil / grease contaminated surfaces
Terrazzo / Marble / Ceramics / Engineering Brick	
Fibre Glass	
Plywood / OSB / Chipboard / MDF / Wood	
Plaster / Plaster Board	
Epoxy / PU Coatings & Screeds	

*This table is a guide only and you may encounter different substrates and other factors that will affect the suitability such as undulations, flaking paint or weak plaster.

Installation Guidelines

Side Trims & Welded Corners for Stairs

Data Sheet: Page 11 of 12 NF/LB 21.11.2017

Application

The adhesive should be applied in straight lines** by means of a suitable applicator gun. Fix nozzle and cut the aperture to the required width dependent on application. Apply the adhesive to one surface only and then press the two surfaces together within the open time of the adhesive.

The following table has been compiled to provide a guide as to how much adhesive is required for each trim, dependent on the trim size and surface type. You must also refer to and follow the product specific installation instructions available from gradus.com before installation takes place. Ensure you apply the correct amount of adhesive to ensure a suitable bond.

Product Code	Absorbent Surface		Non Absorbent Surface	
	Size of Bead	No of Beads	Size of Bead	No of Beads
TA2C, TA1, TA5, TA5B, TA5C, HT38, HT44, HT47, TP32	5mm	1	3mm	2
HT42, MT42, TA42, TAC42, TAXT5B, HXT44, HXT47, TAXT42, HXT42	5mm	1	3mm	2
TAXT5212, TAXT523, BT42, TA50, TA66	5mm	2	3mm	2

Absorbent Surfaces

Apply the adhesive to the stair trim in accordance with the application table above. Where more than one bead is required ensure the beads are spread equidistant across the width of the trim leaving a 5mm gap at the edges. See diagram 1.

Place the trim on to the substrate and apply pressure along the length to ensure complete contact. Take care to remove any excess adhesive with a proprietary wipe. The fixed flange or fixing clip will hold the trim in place whilst the adhesive sets.

Cure Time – allow approximately 1 hour after fixing. The installation should be checked to ensure the bond is sufficiently secure before opening the area.

Non-Absorbent Surfaces

When bonding stair trims to metal substrates or other suitably smooth non-absorbent surfaces first dampen or mist the area with water. **Do not** leave standing water on the surface. In addition, mist the underside of the stair trim with water before applying adhesive. This method will accelerate the cure time of the adhesive and allow the area to be opened after a minimum of 2 hours, however the bond strength should be checked to ensure it is safe to open.

Apply the adhesive to the stair trim in accordance with the application table above. Where more than one bead is required ensure the beads are spread equidistant across the width of the trim leaving a 5mm gap at the edges. See diagram 2.

Place the trim on to the substrate and apply pressure along the length to ensure complete contact. Take care to remove any excess adhesive with a proprietary wipe. The fixed flange or fixing clip will hold the trim in place whilst the adhesive sets.

Cure Time – allow approximately 2 hours after fixing. The installation should be checked to ensure the bond is sufficiently secure before opening the area. For when bonding non-absorbent surfaces that are not suitably dampened the cure time will be extended.

Cleaning

Remove any excess wet adhesive from surfaces with a proprietary wipe

Precautions

Temperature – adhesive must be applied onto substrates which are above 5°C and remain so whilst curing takes place.

****Do not snake / zig zag the adhesive beads, as this can significantly reduce bond strength** – always apply in straight (linear) beads.

Installation Guidelines**Side Trims & Welded Corners for Stairs**

Data Sheet: Page 12 of 12 NF/LB 21.11.2017

- Thicker beads take longer to cure, however always ensure sufficient material is applied relative to the installation being undertaken.
- Stair trims must not be disturbed or moved during the curing period of the adhesive.
- Always check the bond is secure before opening the area to traffic.
- Do not apply adhesive above the locating flange or fixing clip. Do not remove fixing clips until the adhesive has set.

Technical Information

Colour	White
Consistency	Paste
Open Time @ 23°C and 50% RH	Maximum 10 minutes

Coverage

Tube Size	Bead Diameter	Coverage Per Tube
290ml	3mm	38 linear metres
290ml	5mm	14 linear metres

Note – Coverage rates will depend on the condition and absorbency of the substrate

Packages

290ml composite cartridge
12 cartridges per carton

Standards

Conditions must comply with the relevant British Standards

Tools

Heavy duty applicator gun (preferably with an 18:1 trigger ratio)

Storage & Shelf Life

Store between 5°C and 25°C. Protect from frost.
18 month shelf life in unopened cartridges stored under good conditions.