

T3RRA



7.8 | Smooth Design

October 2026

Contents

- 7.8 | Smooth Design
 - Regular Smoothing
 - Directional Smoothing
 - Region Blending

7.8 | Smooth Design

Select the '**Smooth**' button to create a more regular surface with fewer and more gradual hummocks and dips. The smoothing strength can be adjusted to produce a stronger or lesser effect as needed.

[Watch a Smooth Design video on YouTube](#)



Regular Smoothing

Regular smoothing applies an averaging filter to the surface of the field to remove bumps and dips.

The '**Smoothing strength**' slide bar controls how smooth it is by increasing the radius that is used in calculations. The smaller the slider value, the less of an effect the smoothing will have.

Smoothing can be applied to the whole field, or to individual regions. It can be applied to the original surface, or to an existing design.









Surface Smoothing

☒ Regular smooth

☐ Region blending

☐ Directional smooth

Smoothing strength

10 m

Cut/fill ratio:

Whole Field

☐ on elevation

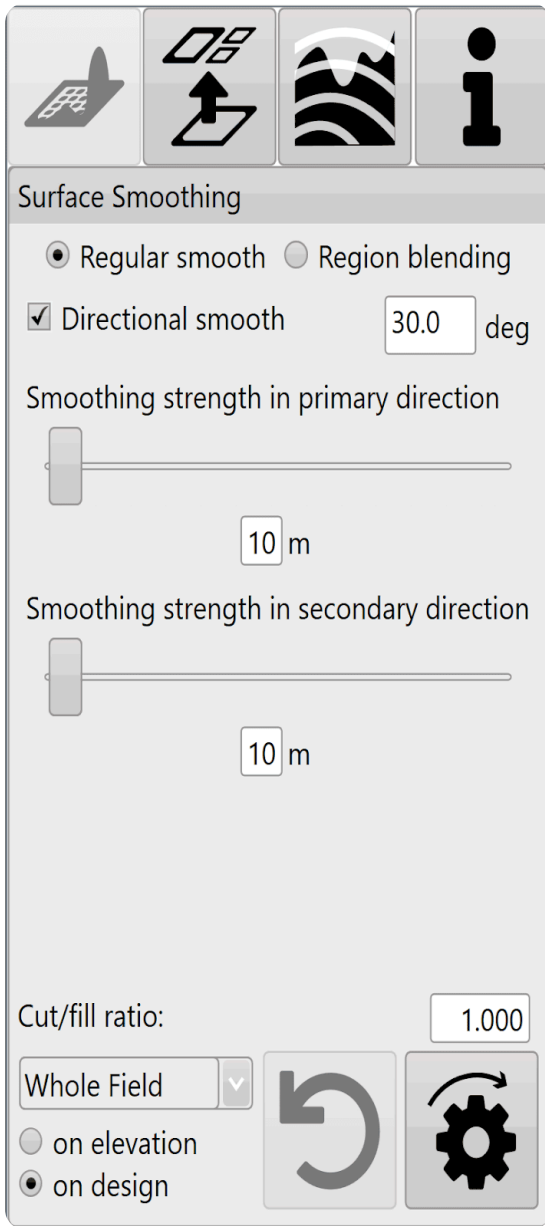
☒ on design





1.000

Directional Smoothing



The screenshot shows the 'Surface Smoothing' control panel. At the top are four icons: a grid, a square with an upward arrow, a wavy line, and an information icon. Below these, the 'Surface Smoothing' section contains two radio buttons: 'Regular smooth' (selected) and 'Region blending'. A checked 'Directional smooth' checkbox is followed by a text box containing '30.0' and the unit 'deg'. Below this are two sliders for 'Smoothing strength in primary direction' and 'Smoothing strength in secondary direction', both with text boxes showing '10 m'. At the bottom, the 'Cut/fill ratio' is set to '1.000' with a dropdown menu currently showing 'Whole Field'. Two radio buttons at the bottom left are 'on elevation' and 'on design' (selected). To the right of these are two large icons: a circular arrow and a gear.

'Directional smooth' is a check box just below regular smoothing.

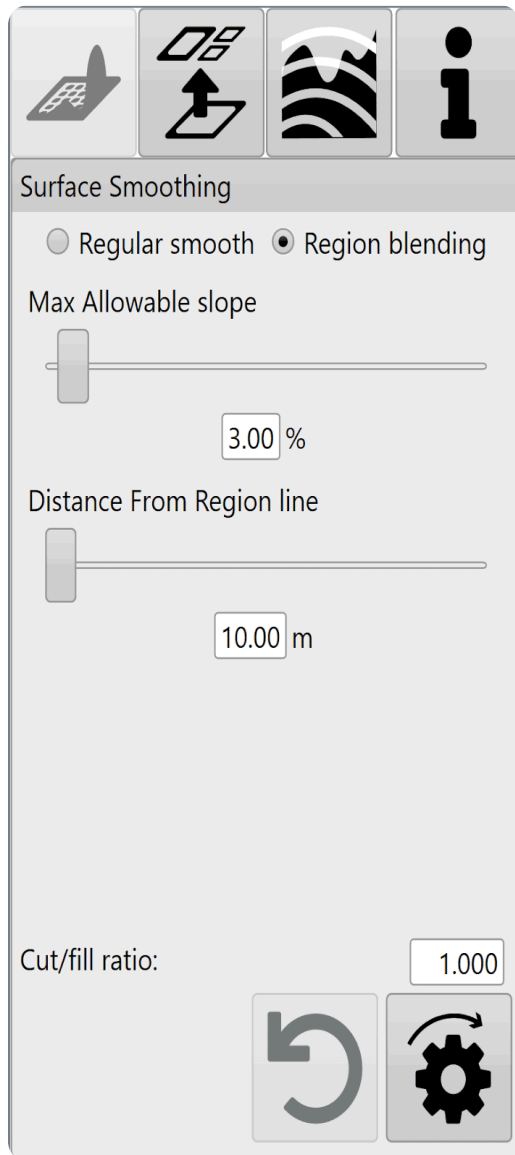
Directional smoothing causes the smoothing effect to be stronger in a particular direction and weaker in the perpendicular direction.

Enter the primary smoothing direction in the provided text box.

'Smoothing strength in the primary direction' allows you to set the influence radius in that direction.

'Smoothing strength in the secondary direction' controls the influence radius at a 90 degree angle to the primary direction.

Region Blending



The image shows a software interface for 'Region Blending'. At the top, there are four icons: a grid, a square with an upward arrow, a wavy line, and an information icon. Below these is a 'Surface Smoothing' section. It contains two radio buttons: 'Regular smooth' and 'Region blending', with 'Region blending' selected. Below the radio buttons are two sliders. The first slider is labeled 'Max Allowable slope' and has a value of '3.00 %'. The second slider is labeled 'Distance From Region line' and has a value of '10.00 m'. At the bottom, there is a 'Cut/fill ratio:' label with a value of '1.000'. Below the ratio are two buttons: a circular arrow and a gear icon.

Surface Smoothing

☐ Regular smooth ☒ Region blending

Max Allowable slope

3.00 %

Distance From Region line

10.00 m

Cut/fill ratio: 1.000

Region blending allows you to “feather” the edges of regions to allow for smooth transitions between regions.

'Max Allowable slope' lets you set the maximum steepness that can be used to achieve a region blend.

'Distance from Region line' limits how far into each region the blend can go, in order to help make sure that other design elements are not affected.

 **NOTE:** changes made with region blending may not be obvious in 2D view but can be much more prominent in 3D view, or in the cut/fill map.

Press **'Apply'** after parameters are entered in order to see effects.

Once you are happy with the design follow the steps in the ['completing your design'](#) section. [Watch another Smooth Design video on YouTube](#)

