

Surface feature types

Any feature used in the triangulation process must be incorporated as a particular kind of surface-feature type. A surface-feature type influences the triangulation and thus the definition of the resulting surface. The following is a list of supported surface-feature types for TINs:

Mass point - individual points are entered into the triangulation process as nodes to the triangulation. Mass points can be defined not only from input point data but also from the vertices of input lines and polygon boundaries.

Breakline - linear features are maintained in the triangulation as a sequence of one or more triangle edges. Breaklines can be defined not only from input line data but also from polygon boundaries.

Replace polygon - polygonal features are maintained in the triangulation as a sequence of one or more triangle edges. The model's boundary and all interior heights will be assigned one constant value.

Erase polygon - polygonal features are maintained in the triangulation as a sequence of one or more triangle edges. All areas inside the polygon are marked as being outside the zone of interpolation for the model. Analytic operations such as volume calculation, contouring, and interpolation will ignore these areas.

Clip polygon - polygonal features are maintained in the triangulation as a sequence of one or more triangle edges. All areas outside the polygon are marked as being outside the zone of interpolation for the model. Analytic operations such as volume calculation, contouring, and interpolation will ignore these areas.

Fill polygon - all triangles falling inside the polygon are assigned an integer attribute value. No height replacement, erasing, or clipping takes place.