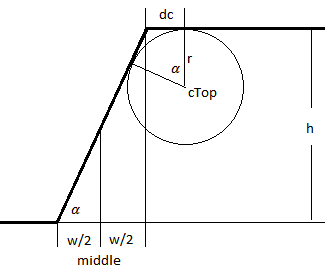
Rounding corners of 3D flat figure with trapezoid edge

Trapezoid edge of plane figure of height . At each point edge has middle point and normal vector of length w. Local coordinates relative to middle point : – vertical (bottom plane , top plane ). Top and bottom smoothing with radius and additional points in smoothing arc. can be the same for all edge or be a fraction of .

,

Position of top center:

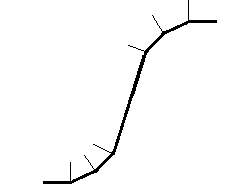
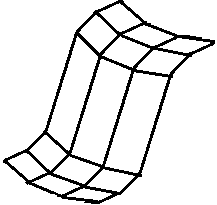


Smoothing points are evenly distributed on the smoothing arc. There are points on each arc including arc start and end. Positions of smoothing points, , and normal at each point, , defined as

Bottom smoothing is defined as follows:

, .

Bottom normal, , for each edge point is the same as top. Smoothed edge and normals look like left polygon ().

**Useful choice: ,**