

We start with a depth buffer that is cleared to 1, the far value, meaning that all pixels on our quad (which is at the near z value, 0) will be processed.

Depth buffer

1	1	1	1
1	1	1	1
1	1	1	1

We then run the first stage, which will discard the output if the window is accepted, writing a 0 if it is rejected. This causes the depth buffer to be updated to the z value of the quad, 0, for those windows which have been rejected, whereas the previous depth of 1 is preserved for the accepted windows, since their output is discarded.

1st Stage Output  
d discarded  
0 rejected

d	0	d	0
0	d	d	0
0	0	d	0

Updated depth buffer

1	0	1	0
0	1	1	0
1	1	0	1

On subsequent stages, those pixels with a depth value of 0 will not be processed, since we are using the "gl.LESS" depth test to compare the depth of the pixel on our quad with the depth in the depth buffer, and because zero is not less than zero, the test fails, so the pixel is not processed.

2nd Stage Output  
x not processed  
d discarded  
0 rejected

d	x	0	x
x	0	d	x
x	x	0	x

Updated depth buffer

1	0	0	0
0	0	1	0
1	1	0	1