

Name

`gl_FragDepth` — establishes a depth value for the current fragment

Declaration

```
out float gl_FragDepth ;
```

Description

Available only in the fragment language, *gl_FragDepth* is an output variable that is used to establish the depth value for the current fragment. If depth buffering is enabled and no shader writes to *gl_FragDepth*, then the fixed function value for depth will be used (this value is contained in the z component of [gl_FragCoord](#)) otherwise, the value written to *gl_FragDepth* is used. If a shader statically assigns to *gl_FragDepth*, then the value of the fragment's depth may be undefined for executions of the shader that take that path. That is, if the set of linked fragment shaders statically contain a write to *gl_FragDepth*, then it is responsible for always writing it.

Version Support

Variable Name	OpenGL Shading Language Version											
	1.10	1.20	1.30	1.40	1.50	3.30	4.00	4.10	4.20	4.30	4.40	4.50
<code>gl_FragDepth</code>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

See Also

[gl_FragCoord](#)

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