



## Design Parameters (FSH 2309.18, Section 23.11, Exhibit 01)

Design Parameters are technical guidelines for the survey, design, construction, maintenance, and assessment of National Forest System trails, based on their Designed Use and Trail Class and consistent with their management intent<sup>1</sup>. Local deviations from any Design Parameter may be established based on trail-specific conditions, topography, or other factors, provided that the deviations are consistent with the general intent of the applicable Trail Class.

Designed Use HIKER/PEDESTRIAN		Trail Class 1	Trail Class 2	Trail Class 3 <sup>2</sup>	Trail Class 4 <sup>2</sup>	Trail Class 5 <sup>2</sup>
<b>Design Tread Width</b>	<b>Wilderness</b> (Single Lane)	0" – 12"	6" – 18"	12" – 24" Exception: may be 36" – 48" at steep side slopes	18" – 24" Exception: may be 36" – 48" at steep side slopes	Not applicable
	<b>Non-Wilderness</b> (Single Lane)	0" – 12"	6" – 18"	18" – 36"	24" – 60"	36" – 72"
	<b>Non-Wilderness</b> (Double Lane)	36"	36"	36" – 60"	48" – 72"	72" – 120"
	<b>Structures</b> (Minimum Width)	18"	18"	18"	36"	36"
<b>Design Surface<sup>3</sup></b>	<b>Type</b>	Native, ungraded May be continuously rough	Native, limited grading May be continuously rough	Native, with some on-site borrow or imported material where needed for stabilization and occasional grading Intermittently rough	Native with improved sections of borrow or imported material, and routine grading Minor roughness	Likely imported material, and routine grading Uniform, firm, and stable
	<b>Protrusions</b>	≤ 24" Likely common and continuous	≤ 6" May be common and continuous	≤ 3" May be common, not continuous	≤ 3" Uncommon, not continuous	No protrusions
	<b>Obstacles</b> (Maximum Height)	24"	14"	10"	8"	No obstacles
<b>Design Grade<sup>3</sup></b>	<b>Target Grade</b>	5% – 25%	5% – 18%	3% – 12%	2% – 10%	2% – 5%
	<b>Short Pitch Maximum</b>	40%	35%	25%	15%	5% FSTAG: 5% – 12% <sup>2</sup>
	<b>Maximum Pitch Density</b>	20% – 40% of trail	20% – 30% of trail	10% – 20% of trail	5% – 20% of trail	0% – 5% of trail

10/16/2008